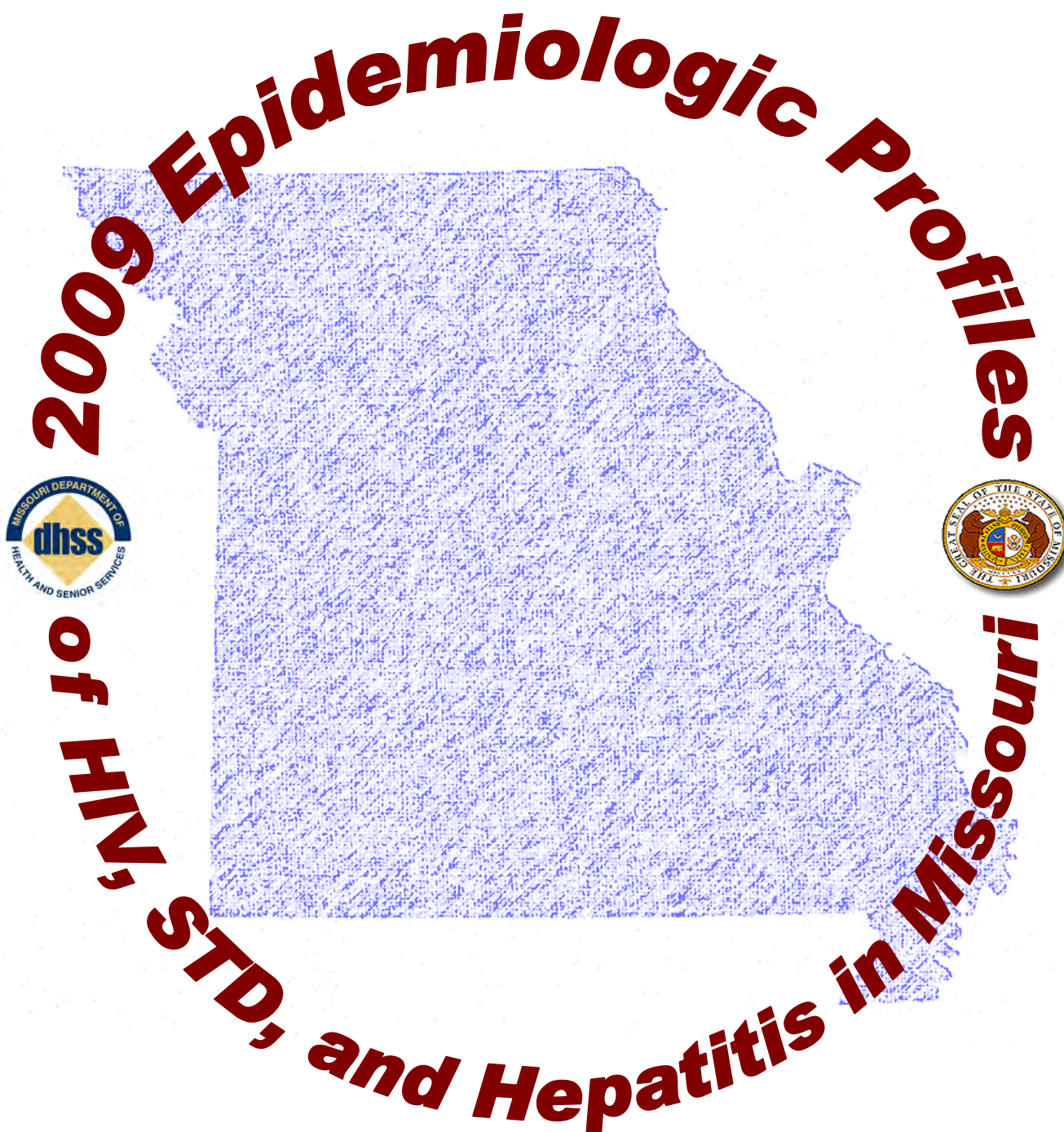


2009 Epidemiologic Profiles of HIV, STD, and Hepatitis in Missouri



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Background

The Division of HIV/AIDS Prevention at the Centers for Disease Control and Prevention (CDC) and the Health Resources and Services Administration (HRSA) released the *Integrated Guidelines for Developing Epidemiologic Profiles* in 2004. These guidelines are meant to assist states in creating standardized profiles that meet the planning needs of HIV prevention and care programs, while allowing freedom to portray unique situations within the state. The epidemiologic profile is divided into two sections, within which five questions are addressed.

Profile Organization:

Section 1: Core Epidemiological Questions

This section deals with understanding the characteristics of the general population, the distribution of HIV disease and sexually transmitted diseases (STDs) in the state, and a description of the population at risk for HIV and STD infection. This section is organized around three key questions:

Question 1: What are the sociodemographic characteristics of the general population of Missouri?

Describes the overall demographic and socioeconomic characteristics of the general population of Missouri.

Question 2: What is the scope of the HIV/AIDS epidemic in Missouri?

Describes the impact of the HIV/AIDS epidemic in Missouri.

Question 3: What are the indicators of HIV/AIDS infection risk in Missouri?

Provides an analysis of the high-risk populations. Both the direct and indirect measures of risk behaviors associated with HIV transmission and the indicators of high-risk behaviors are described in this section.

Section 2: Ryan White HIV/AIDS Care Act Special Questions and Considerations

This section focuses on the questions that pertain to the HRSA HIV/AIDS care planning groups. It describes access to, utilization of, and standards of care among persons in Missouri who are HIV infected. It is organized around two key questions:

Question 4: What are the HIV service utilization patterns of individuals with HIV disease in Missouri?

Characterizes patterns in the use of services by the population living with HIV/AIDS in Missouri.

Question 5: What are the number and characteristics of the individuals who know they are HIV positive but who are not in care?

Assesses the unmet need of persons who know they are HIV positive, but are not in care. Describes their service needs and perception of care.

General Information:

The 2009 *Profiles* provides a comprehensive update of all five questions in the *Profiles* including the sociodemographic characteristics of Missourians; the epidemiology of HIV, STDs, hepatitis; care services utilization among persons living with HIV disease; and unmet primary medical care needs among individuals living with HIV through 2009. Please refer to the data sources used in the *Profiles* on page ii and the technical notes on page vi to develop a better understanding for interpreting the data presented. Additional sections of the profile are dedicated to providing data specific to each of the six HIV planning regions to assist with regional level planning efforts.

Missouri Planning Cycle:

The statewide Missouri Community Planning Group (CPG) operates on a five year planning cycle. The current prevention plan runs from 2006-2010. In 2010, a new comprehensive HIV prevention plan will be developed for 2011-2015. To best serve the CPG planning process, updates to the epidemiologic profile are designed to coincide with the CPG's planning cycle. As a result, a complete update of all five questions of the epidemiologic profile is completed every five years, coinciding with the development of the new comprehensive HIV prevention plan. In the other years, updates will only be made to selected questions of the profile. The current *Profiles* represents a comprehensive update to all questions in the *Profiles*. For data from the previous comprehensive *Profiles*, please refer to the *2004 Epidemiologic Profile*, which can be accessed at http://www.dhss.mo.gov/HIV_STD_AIDS/2004EpidemiologicProfile.pdf.

Data Sources

1. *Population Data*

American Community Survey, U.S. Census Bureau

The American Community Survey is a nationwide sample survey conducted every year by the U.S. Census Bureau. The survey provides population data regarding age, race, income, country of birth, languages spoken at home, education, employment, and many other areas. Single-year and three-year estimates are currently available for the American Community survey. Single-year estimates are only available for geographic areas with a population of 65,000 or more. Three-year estimates are available for geographic areas with a population of 20,000 or more. For more information, visit <http://www.census.gov/acs/www/>.

Migration Data Files, Internal Revenue Service (IRS)

State- and county-level migration estimates can be derived from changes in the tax filer's mailing address on domestic and foreign tax return forms between filing years. The IRS produces data files that are freely available. Migration patterns can be assessed by changes in the total number of exemptions reported between two filing years. There are some limitations associated with using tax return information to estimate migration patterns. First, the migration data file only includes tax returns filed through the 39th week of the year, which account for approximately 95% to 98% of all filed individuals returns. Second, differences exist in the likelihood of filing a tax return among various populations. Often the elderly and poor are less likely to file returns, and therefore would not be accurately represented in the migration data files. Third, the mailing address reported on the tax return may not reflect the true address of residence. Migration data are not available by demographic characteristics such as sex, age, and race/ethnicity. For more information, visit <http://www.irs.gov/taxstats/article/0..id=212683.00.html>.

Population Estimates, Missouri Department of Health (MDHSS), Bureau of Health Informatics and U.S. Census Bureau

MDHSS maintains population files for Missouri and its counties based on data provided by the U.S. Census Bureau in partnership with the Federal State Cooperative Program for Population Estimates. Census counts are produced every ten years, with the 2000 census representing the most recent census. Population estimates are produced for non-census years based on adjustments made to the most recent census counts. Due to the time required to compute these estimates, the most recent year's estimates are not available for use in the *Profiles*, and the previous year's population estimates are used instead. Beginning with the 2008 population estimates new race/ethnicity categories are being used, which include a separate estimate for persons identifying being of more than one race. This change reflects the current level of race/ethnicity detail that is captured for HIV surveillance data. As a result of the change, the population estimates from prior *Profiles* will not be comparable with the current *Profiles*.

Small Area Health Insurance Estimates (SAHIE), U.S. Census Bureau

SAHIE are model-based estimates of health insurance coverage for counties and states derived by combining a variety of data sources including: the Annual Social and Economic Supplement of the Current Population Survey, demographic population estimates, aggregated federal tax returns, participation records for the Supplemental Nutrition Assistance Program, county business patterns, Medicaid and Children's Health Insurance Program participation records, and the Census 2000. This is currently the only data source providing estimates of health insurance for all counties in the U.S. Due to the time it takes to develop the models based on the wide variety of data sources, estimates generally reflect a date a few years prior to the date the estimates are released. For example, health insurance estimates for 2006 were released in August 2009. For more information, visit <http://www.census.gov/did/www/sahie/>.

Small Area Income and Poverty Estimates (SAIPE), U.S. Census Bureau

SAIPE are model-based estimates of income and poverty provided annually for all states, counties, and school districts. The estimates are derived by combining survey data, population estimates, administrative records, and federal tax information. SAIPE represent the best source of consistent single-year poverty and income estimates for small geographic areas. However, the estimates by demographic characteristics such as race/ethnicity and sex are not available for this data source. For more information, visit <http://www.census.gov/did/www/saipe/>.

2. HIV Epidemic Data

HIV/AIDS Surveillance Data, eHARS

Missouri's communicable disease reporting rule, 19 CSR 20-20.020 established reporting of AIDS cases in 1983, named HIV cases in 1987, CD4 lymphocyte counts in 1991, and HIV viral load lab results in 2000. Demographic information, vital status, mode of exposure, laboratory results, and treatment and service referrals are collected on standardized case report forms and laboratory reports. The Missouri Department of Health and Senior Services (MDHSS), Bureau of HIV, STD, and Hepatitis (BHSH) is responsible for managing the HIV/AIDS surveillance data, stored in the evaluation HIV/AIDS Reporting System (eHARS). Evaluations have shown a high level of completeness of the surveillance system. However, the surveillance system primarily collects information only on individuals diagnosed with HIV disease in Missouri. Some information regarding those currently living with HIV in Missouri is maintained in eHARS, but is not complete. Therefore, the *Profiles* only includes data on those whose most recent diagnosis (HIV or AIDS) occurred in Missouri. The data collected in the surveillance system is based on diagnosis date, and not the time of infection. The diagnosis can be made at any clinical stage of the disease. The characteristics associated with new diagnoses may not reflect characteristics associated with recent infection. The surveillance system only includes data on individuals that are tested confidentially and reported. Members of certain subpopulations may be more or less likely to be tested, and therefore different subpopulations could be over or under-represented among diagnosed and reported HIV cases.

3. HIV-Related Indicators of Risk Data

Behavioral Risk Factor Surveillance System (BRFSS) Survey, CDC

The BRFSS survey is an annual population-based, random-digit-dialed, telephone survey of the state's civilian, non-institutionalized, adult population, 18 years of age and older. Interviewers ask questions related to health behaviors, health screening, quality of life, mental health, impairment, and access to health care and insurance. The results are weighted by demographic characteristics and by selection probability, and are used in planning, implementing, and evaluating health promotion and disease prevention programs. For participants 18 – 64 years of age, the interview includes questions regarding HIV/AIDS-related behaviors and testing. The BRFSS does not always contain the same questions from one year to the next. For more information, visit <http://www.cdc.gov/brfss/>.

Counseling, Testing and Referral Program Data

CDC-funded prevention project areas, including Missouri, are required to collect information related to HIV tests performed at publicly funded HIV testing sites. The data collected include demographic information, behavioral risk information, previous testing history, along with many other elements. The data are only representative of people who seek HIV testing at publicly funded testing sites. The data are collected for each testing experience, and multiple tests conducted on the same individual cannot be differentiated. Beginning in September 2007, MDHSS was funded by CDC to conduct expanding HIV testing initiatives in the state. This initiative was implemented to provide HIV testing in select urban facilities (including hospital emergency departments, private clinics, and public health clinics) with the intent to test all persons seeking care. Sites were selected in Kansas City and St. Louis, and testing began in early 2008. The required data for this initiative include demographic information and test results. Data regarding previous testing history and behavioral risk are considered optional, and are missing for a majority of the records collected.

Hepatitis Surveillance Data, MDHSS, WebSurv

Missouri's communicable disease reporting rule, 19 CSR 20-20.020 requires reporting of acute and chronic hepatitis B and C cases, and prenatal hepatitis B within three days to the local health authority or MDHSS. Demographic information, vital status, laboratory results, and treatment information are collected on standardized report forms and laboratory reports. MDHSS BHSH is responsible for managing the hepatitis surveillance data, stored in the Missouri Health Surveillance Information Systems (WebSurv). Limitations of the data include incomplete race/ethnicity information and underreporting.

HIV in Correctional Facilities, Missouri Department of Corrections and the Bureau of Justice Statistics

All Missouri Department of Corrections inmates are required to be tested for HIV at entry, unless laboratory evidence of HIV infection subsequent to the time of trial is provided, and at exit from the system (Section 191.659 RSMo). The Department of Corrections maintains data on all inmates, including information regarding an inmate's HIV status. The data from the Department of Corrections do not include offenders in local jails, private facilities, or federal facilities. No information is available regarding the HIV status of offenders recently released from the facility. The Department of Corrections reports information regarding HIV infection in their facilities to the Bureau of Justice Statistics. This organization compiles reports for all states and from federal correctional facilities to produce a report regarding the prevalence of HIV infection in

correctional facilities. The reports can be accessed at <http://bjs.ojp.usdoj.gov/index.cfm>. The reported totals presented in the Bureau of Justice Statistic reports for Missouri may not match the totals provided by the Department of Corrections, as the datasets used to produce the figures could be based on the correctional population at slightly different times during the year. The Department of Corrections noted that the number of HIV-positive offenders reported to the Bureau of Justice Statistics in 2008 (461) was incorrect. Therefore, it is not appropriate to interpret trends including the 2008 time period from the Bureau of Justice Statistics reports.

Hospitalization Discharge, Charges, and Days of Care, Missouri Information for Community Assessment (MICA)

The dataset includes hospital discharges among Missouri residents from non-federal and non-state acute care general and specialty hospitals. Discharges are classified into diagnosis categories based on the first of 23 possible diagnoses coded on the discharge record. Hospital charges represent the total amount billed, and may not reflect the costs associated with providing the service. Therefore, charge data should only be used to compare the impact between disease categories or geographic regions, and should not be used to produce a total cost associated with a specific disease. The data set also includes days of care, which is calculated as the difference between the admission and discharge dates. If admission and discharge occurred on the same day, days of care is set to one. For more information, visit http://www.dhss.mo.gov/D_C_DofCMICA/Documentation.html.

Missouri Pregnancy Related Assessment and Monitoring System (MoPRA), MDHSS

MDHSS conducted a population-based, maternal health survey in 2005 to assess maternal behaviors before, during, and after pregnancy. Data were collected from a stratified random sample of Missouri resident women who delivered a live birth within the state in 2005. The weighted response rate for the survey was 61%, which was below the CDC recommended response rate of at least 70%. As a result, caution should be taken when interpreting the MoPRA estimates. For more information, visit <http://www.dhss.mo.gov/PRAMS/>.

National HIV Behavioral Surveillance (NHBS)

NHBS is a cross-sectional survey funded by the CDC in 25 cities in the U.S., including St. Louis. This survey collects behavioral information among populations at high risk for HIV infection. The three populations include men who have sex with men, injection drug users, and heterosexuals at high risk for HIV infection. Each year the survey rotates through one of the three population risk groups, so survey information is collected on a single risk group once every three years. In Missouri, currently data are only available from the survey in 2005 among injection drug users. The results of this analysis should be interpreted with some caution as the analysis presented was derived from the original dataset, and not the final dataset provided by CDC after data cleaning activities were completed.

National Survey of Substance Abuse Treatment Services (N-SSATS), Substance Abuse and Mental Health Services Administration (SAMHSA)

This national survey annually collects information from public and private facilities providing substance abuse treatment. The survey does not include information from treatment programs in jails or prisons. The survey collects information regarding the characteristics, services offered, and number of clients receiving treatment at the facilities. The survey response rate is typically very high (>95%). This is a point-prevalence survey, meaning that it captures a snapshot of the facility on a particular date. This does not represent the annual total of clients served, or necessarily the maximum capacity that a facility can handle. For more information, visit <http://www.dasis.samhsa.gov/dasis2/nssats.htm>.

National Survey on Drug Use and Health, SAMHSA

This survey is a national, multi-stage probability sample regarding illicit drug, alcohol and tobacco use among the noninstitutionalized population twelve years of age or greater. Information is collected on lifetime, annual, and past-month usage of various substances; substance abuse treatment history; the perceived need for treatment; mental health indicators; and core demographics. Survey results prior to 2002 should not be compared with more recent surveys due to changes in recruitment and weighting procedures. For more information, visit <https://nsduhweb.rti.org/>.

School Health Profiles, CDC

The School Health Profiles is derived from a sample survey of schools that serve students from sixth through twelfth grade in each state, territory, or city of interest. The survey is conducted in even years, and assesses school health policies and programs. Survey areas include school health education requirements, physical education requirements, health policies related to HIV/AIDS, tobacco-use prevention, nutrition, asthma management, and the coordination of school health with the family and community. In 2008, 47

states, 18 cities, and four territories collected data and were included in the analysis. Surveys are sent from the state, local or territorial education or health agency to the principal. The principal and the school's lead health education teacher complete the appropriate survey responses. Results from the principal and teacher surveys are weighted. For more information, visit <http://www.cdc.gov/healthyYouth/profiles/>.

STD Surveillance Data, STD*MIS

Missouri's communicable disease reporting rule, 19 CSR 20-20.020 requires reporting of chlamydia and gonorrhea cases within three days, and syphilis, including congenital syphilis, within one day to the local health authority or MDHSS. Demographic information, vital status, laboratory results, and treatment information are collected on standardized report forms and laboratory reports. The MDHSS BSHS is responsible for managing all reportable STD surveillance data, stored in the STD Management Information System (STD*MIS) database. Data in this system are presented based on the date of report to the health department and not the diagnosis date. The data represent only those individuals tested and reported, which underestimates the true burden of infection as many infected individuals do not seek care, often due to a lack of symptoms. In addition, many people receive treatment without being tested, again underestimating the true burden of infection. Since morbidity is frequently entered based on the receipt of laboratory reports at MDHSS, race and ethnicity information is often not available. Incomplete race and ethnicity reporting limits the interpretation of trends for these characteristics.

Treatment Episode Data Set (TEDS), SAMHSA

This data set collects national information regarding admissions to public and private providers of substance abuse treatment that receive public funding. At a minimum for all states, the data set includes demographic information, date of admission, number of prior treatment episodes, and information related to the substance abuse problem. TEDS does not include all admissions to substance abuse treatment; the completeness of client-level data included in the data set varies depending on state reporting practices and the availability of public funds. For more information, visit <http://www.oas.samhsa.gov/2k2/TEDS/TEDS.cfm>.

Youth Risk Behavior Surveillance System (YRBSS) Survey, CDC

The YRBSS survey is administered by the Missouri Department of Elementary and Secondary Education to monitor specific behaviors among high school students that contribute to the leading causes of morbidity and mortality. The survey is administered in the spring of odd-numbered years. Student participation is voluntary, and local parental permission procedures are followed. The students who participate in the survey constitute a valid sample of high school-age youth. The results may be used to make inferences about the health-risk behaviors of all Missouri public high school students. However, the results from the statewide survey cannot be used to provide estimates for smaller geographic areas than the state. The YRBSS does survey some large, urban school districts to obtain estimates for a smaller geographic area; no Missouri school district participated in the more area-specific survey. For more information, visit <http://www.cdc.gov/HealthyYouth/yrbs/index.htm>.

4. HIV Care Services Data

HIV Case Management Data, FACTORS

MDHSS participates in a cooperative agreement with HRSA for the provision of several programs funded by the Ryan White HIV Treatment Modernization Act. Data for persons served by these programs are collected and stored in the FACTORS database. Data include key demographic and eligibility related variables for persons residing in Missouri, and portions of Illinois and Kansas. These data are used to monitor the level of need and the provision of services for individuals utilizing Ryan White funded services.

Technical Notes

HIV Disease, HIV case, AIDS case: HIV disease includes all individuals diagnosed with the HIV virus regardless of the stage of disease progression. All persons with HIV disease can be sub-classified as either an **AIDS case** (if they are in the later stages of the disease process and have met the case definition for AIDS), or an **HIV case** (if they are in the earlier stages of the disease process and have not met the AIDS case definition). In this report, the sub-classification of HIV or AIDS is based on an individual's status of disease progression as of December 31, 2009.

Date of Diagnosis: Represents the date an individual was first diagnosed with the HIV virus, regardless of the stage of disease progression. However, in many instances the initial diagnosis of infection does not occur until several years after the initial infection, so at best the trends in diagnosed HIV cases can only approximate actual trends in new HIV infections.

Reporting Delay: Delays exist between the time HIV infection is diagnosed and the time the infection is reported to MDHSS. As a result of reporting delays, case numbers for the most recent years of diagnosis may not be complete. Data from recent years should be considered provisional. The data presented in this report have not been adjusted for reporting delay. The data in this report represent all information reported to MDHSS through February 28, 2010.

Place of Residence: Data are presented based on an individual's residence at time of most recent diagnosis of HIV or AIDS. Only cases whose most recent diagnosis was Missouri are included in the analyses presented in the *Profiles*. This may or may not correspond with the individual's residence at the time of initial infection, or to the current residence.

Vital Status: Cases are presumed to be alive unless MDHSS has received notification of death. Current vital status information for cases is ascertained through routine matches with Missouri death certificates, reports of death from other states' surveillance programs, and routine site visits with major reporting sites.

Exposure Category: Despite possible existence of multiple methods through which HIV can be transmitted, cases are assigned a single most likely exposure category based on a hierarchy developed by the CDC. A limitation of the dataset is the large number of cases reported with an undetermined exposure category. Data on cases with missing exposure category information have been proportionately re-distributed into known exposure categories in selected analyses.

Routine Interstate Duplicate Review (RIDR): The mobility of American citizens impacts the ability to accurately track individuals living with HIV/AIDS. Mobility may result in the same HIV infected person being counted in two or more different states. To help respond to potential duplication problems, the CDC initiated the Interstate Duplication Evaluation Project (IDEP), now called Routine Interstate Duplicate Review (RIDR) in 2002. RIDR compares patient records throughout the nation in order to identify duplicate cases. The states with duplicate cases contact one another to compare patient profiles in order to determine the state to which the case belongs, based on residence during the earliest date of diagnosis. Because of this process, the cumulative number of cases within Missouri may change, but the process has increased the accuracy of Missouri's data by reducing the chance that a case has been counted more than once nationally.

Small Numbers: Data release limitations are set to ensure that the information cannot be used to inadvertently identify an individual. It is difficult to make meaningful statements concerning trends in areas with low numbers of cases. Please interpret rates where the numerator is less than 20 cases with caution because of the low reliability of rates based on a small number of cases.

Glossary of Terms: A glossary of terms is located at the end of the profile. If the reader is unclear about any terms used in the *Profiles*, please feel free to contact MDHSS BSHS for additional information.

Race/Ethnicity: Race and ethnicity information has been collected under two different systems in the HIV/AIDS reporting system. Since many cases were reported under the old classification system, the use of the race and ethnicity categories from the old classification system will be maintained in this report. All cases identified with a Hispanic ethnicity will be reported in the *Profiles* as Hispanic, regardless of reported race information. In the text of this document, whenever cases are being discussed, the term "White" means White, not Hispanic, and "Black" means Black, not Hispanic. The number of cases reported as "not Hispanic" may include individuals whose ethnicity was not reported. Individuals who reported multiple racial categories or whose race was unknown are included in the category "Other/Unknown" or "Two or More Races/Unknown" depending on the table or figure.

Diagnoses in Correctional Facilities: For persons living in Missouri correctional facilities (which include state, county, and local facilities) at the time of their HIV/AIDS, chlamydia or gonorrhea diagnosis, the location of the correctional facility is considered the individual's residence at diagnosis. For persons living in Missouri correctional facilities at the time of their syphilis diagnosis, the residence at diagnosis is considered the individual's address prior to being incarcerated. Data for persons diagnosed in Missouri correctional facilities are included in the statewide data, since most of these individuals were likely Missouri residents prior to incarceration. However, diagnoses in Missouri correctional facilities are not included in the HIV/AIDS data for the six HIV regions of the state. This is based on the fact that these individuals, especially those in the state prison system, are often incarcerated in a different location than where they were residing (and were likely infected) prior to imprisonment. If included among the cases from the area where imprisoned at the time of diagnosis, it would distort the picture of the epidemic in that area. Individuals diagnosed at federal correctional facilities in Missouri are not included in any data presented.

Anonymous Testing: The data do not include cases of HIV infection reported or diagnosed in persons anonymously tested at the state's four anonymous testing sites in St. Louis City, Kansas City, Springfield, and Columbia.

Geographic Area vs. HIV Region: When data are presented by geographic area, the St. Louis City represents individuals diagnosed in the St. Louis City limits. St. Louis County represents individuals diagnosed in St. Louis County. Kansas City represents individuals diagnosed in the Kansas City limits. Outstate represents individuals diagnosed in all other areas. Refer to the map below for the counties included when data are presented by HIV region.



Abbreviations

AIDS=Acquired Immunodeficiency Syndrome

BHSH=Bureau of HIV, STD, and Hepatitis

BRFSS=Behavioral Risk Factor Surveillance System

CDC=Centers for Disease Control and Prevention

CPG=Community Planning Group

eHARS=evaluation HIV/AIDS Reporting System

HCV=Hepatitis C Virus

HIV=Human Immunodeficiency Virus

IDEP=Interstate Duplicate Evaluation Project

IDU=Injection drug use/Injection drug user

IRS=Internal Revenue Service

HRSA=Health Resources and Services Administration

MDHSS=Missouri Department of Health and Senior Services

MICA=Missouri Information for Community Assessment

MoPRA=Missouri Pregnancy Related Assessment and Monitoring System

MSA=Metropolitan statistical area

MSM=Men who have sex with men

MSM/IDU=Men who have sex with men and inject drugs

NHBS=National HIV Behavioral Surveillance

NIR=No indicated risk

N-SSATS=National Survey of Substance Abuse Treatment Services

P&S=Primary and secondary

RIDR=Routine Interstate Duplicate Review

SAHIE=Small Area Health Insurance Estimates

SAIPE=Small Area Income and Poverty Estimates

SAMHSA=Substance Abuse and Mental Health Services Administration

STD=Sexually Transmitted Disease

STD*MIS=Sexually Transmitted Disease Management Information System

TEDS=Treatment Episode Data Set

YRBSS=Youth Risk Behavioral Surveillance System



MISSOURI STATE SUMMARY

Population Estimates, by HIV Region, Missouri, 2008

	St. Louis Region	Kansas City Region	Northwest Region	North Central Region	Southwest Region	Southeast Region	Missouri Total
Sex							
Male	1,013,358	602,459	121,908	366,622	544,447	239,113	2,887,907
Female	1,084,806	631,967	122,626	373,932	562,788	247,579	3,023,698
Total	2,098,164	1,234,426	244,534	740,554	1,107,235	486,692	5,911,605
Race/Ethnicity							
White	1,566,385	945,867	227,123	663,805	1,011,539	441,034	4,855,753
Black	406,662	169,893	7,146	38,577	19,807	28,104	670,189
Hispanic	47,304	74,269	5,363	17,466	37,819	7,479	189,700
Asian/Pacific Islander	47,418	18,768	1,322	8,538	10,291	2,329	88,666
American Indian/Alaskan Native	5,115	5,737	941	2,716	9,769	2,196	26,474
Two or More Races	25,280	19,892	2,639	9,452	18,010	5,550	80,823
Total	2,098,164	1,234,426	244,534	740,554	1,107,235	486,692	5,911,605
Race/Ethnicity-Males							
White Male	765,889	463,170	111,972	325,706	494,380	215,812	2,376,929
Black Male	185,018	78,708	4,591	20,936	11,173	14,143	314,569
Hispanic Male	24,686	38,891	2,837	9,474	20,066	4,079	100,033
Asian/Pacific Islander Male	22,904	8,998	613	4,310	5,027	1,117	42,969
American Indian/Alaskan Native Male	2,534	2,881	514	1,387	4,930	1,154	13,400
Two or More Races Male	12,327	9,811	1,381	4,809	8,871	2,808	40,007
Total	1,013,358	602,459	121,908	366,622	544,447	239,113	2,887,907
Race/Ethnicity-Females							
White Female	800,496	482,697	115,151	338,099	517,159	225,222	2,478,824
Black Female	221,644	91,185	2,555	17,641	8,634	13,961	355,620
Hispanic Female	22,618	35,378	2,526	7,992	17,753	3,400	89,667
Asian/Pacific Islander Female	24,514	9,770	709	4,228	5,264	1,212	45,697
American Indian/Alaskan Native Female	2,581	2,856	427	1,329	4,839	1,042	13,074
Two or More Races Female	12,953	10,081	1,258	4,643	9,139	2,742	40,816
Total	1,084,806	631,967	122,626	373,932	562,788	247,579	3,023,698
Age							
<2	56,131	37,009	6,424	19,776	31,397	13,184	163,921
2-12	299,225	187,751	32,175	100,488	159,653	67,847	847,139
13-18	181,773	101,904	19,468	58,950	89,523	39,256	490,874
19-24	164,363	89,933	21,689	73,480	94,815	35,718	479,998
25-44	544,827	340,480	62,936	195,022	296,481	129,880	1,569,626
45-64	585,320	326,118	62,515	186,069	270,538	124,252	1,554,812
65+	266,525	151,231	39,327	106,769	164,828	76,555	805,235
Total	2,098,164	1,234,426	244,534	740,554	1,107,235	486,692	5,911,605

Source: MDHSS, Bureau of Health Informatics

Key Highlights: What are the sociodemographic characteristics of the general population of Missouri?

General Trends

- Missouri's population was estimated to be 5,911,605 in 2008.
- Overall, Missouri's population increased by an estimated 3% between 2004 and 2008.

Where

- Thirty-six counties were classified as being part of a metropolitan statistical area in 2008. At least one metropolitan statistical area was located in each of the six HIV regions in 2008.
- Based on IRS tax filer information, the Southwest HIV region had the greatest number of counties with a net in-migration of 1% or more (5). The Northwest HIV region had the greatest number of counties with a net out-migration of 1% or more (4).
- Large increases of more than 20% in the black population between 2004 and 2008 were concentrated in counties located in the Southwest HIV region.
- Counties with the highest percentages of poverty were concentrated in the Southeast HIV region.

Who

Sex

- In 2008, females represented 51% of Missouri's population.
- The distribution of highest educational attainment level was similar between males and females; approximately 85% of both males and females have completed high school or a high school equivalency or higher.
- Overall, unemployment rates were similar between males and females. However, females with their own children under six years of age had a higher unemployment rate compared to males.

Race/Ethnicity

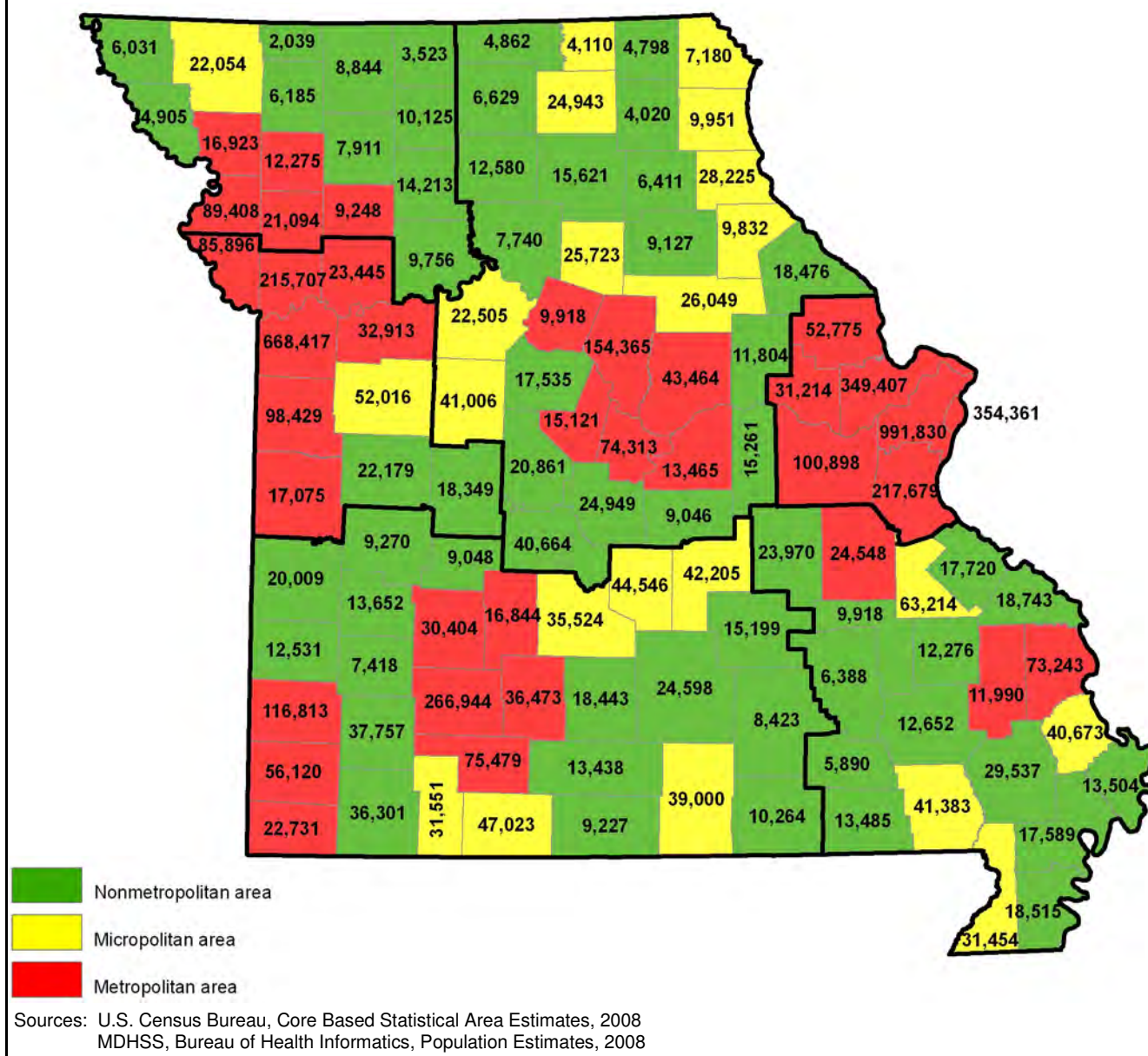
- In 2008, whites comprised 82% of Missouri's population; blacks represented the second largest race/ethnicity category in Missouri (11%).
- The percent of population growth among race/ethnicity groups between 2004 and 2008 was greatest among Hispanics (24%); Asians/Pacific Islanders had the second greatest percent of population growth over the same time period (15%).
- The highest level of educational attainment tended to be lower for minorities compared to whites.
- Minorities under 65 years of age were less likely to report having health insurance than whites. Only 13% of whites less than 65 years of age reported no health insurance in 2006, compared to 20% of blacks, and 32% of Hispanics.
- Unemployment among persons sixteen years of age or older was higher for minorities compared to whites.

Age

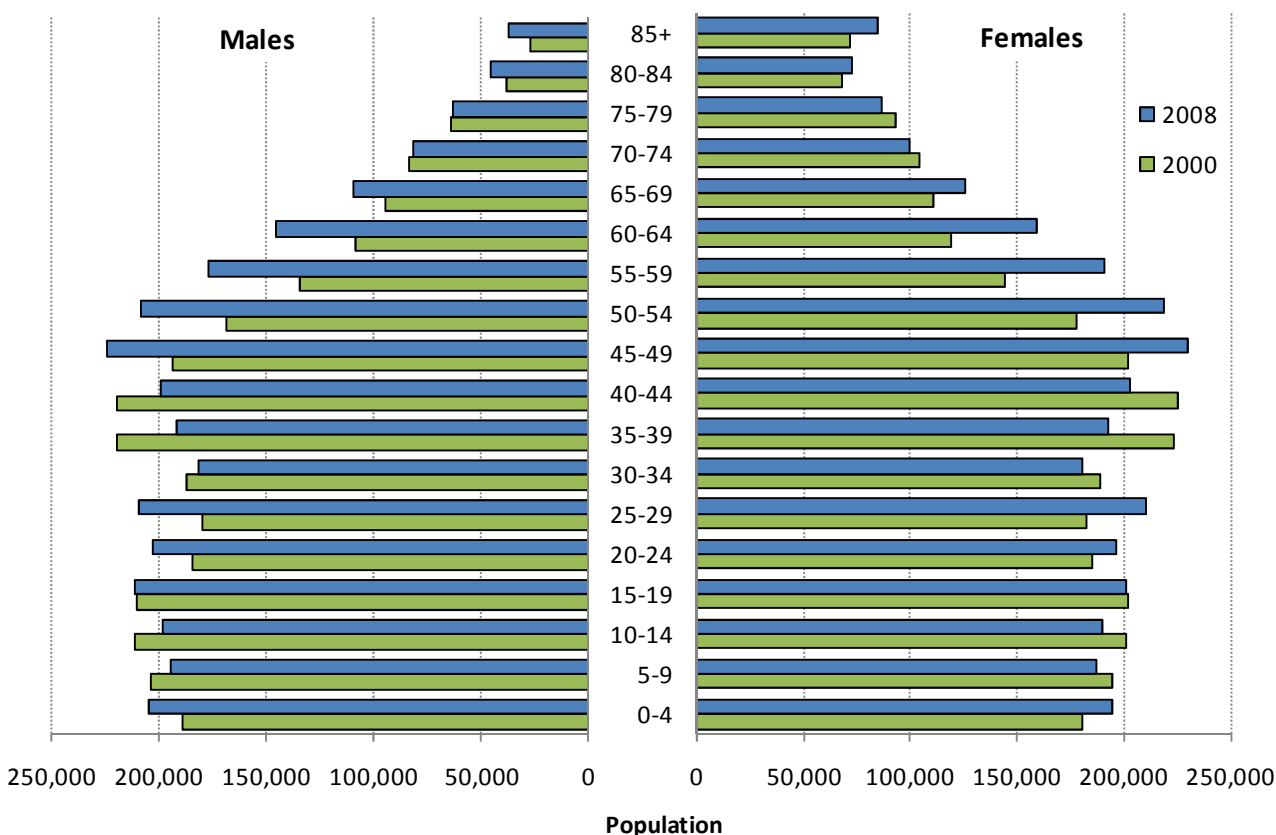
- The median age in Missouri in 2008 was 37.5 years of age; Missouri's median age was slightly older than the U.S. median of 36.8 years old.
- Females in Missouri tended to be slightly older than males. The median age among females in Missouri in 2008 was 38.9 years old, compared to 36.1 years old among males.
- Unemployment rates between 2006 and 2008 tended to decrease with increasing age.

Foreign Born Population and Primary Language

- An estimated 4% of Missouri's population was born in a country outside of the U.S.
- Asia was the continent of birth for the largest number of foreign born Missouri residents. However, Mexico was the single country where the largest numbers of foreign born persons residing in Missouri were born.
- An estimated 94% of Missourians five years of age or older spoke only English at home. Following English, Spanish or Spanish Creole were the most common languages spoken at home (3%).
- An estimated 18% of persons of Hispanic origin reported speaking Spanish, and were not able to speak English well.

Figure 1. Population estimates and metropolitan statistical area classification, by county, Missouri, 2008

Missouri's population was estimated to be 5,911,605 in 2008 based on U.S. Census Bureau estimates. Missouri is comprised of 114 counties, plus the independent city of St. Louis. The U.S. Census Bureau defines groups of counties as metropolitan, micropolitan, or nonmetropolitan areas based on the population size of a core urban area. A metropolitan area contains a core urban area with a population of at least 50,000. It also includes adjacent counties that have a high degree of social and economic integration with the core urban area. A micropolitan area contains a core urban area with a population between 10,000-49,999. It also includes adjacent counties that have a high degree of social and economic integration with the core urban area. An area that does not meet the population requirements for the metropolitan or micropolitan area is referred to as a nonmetropolitan area. Figure 1 illustrates the classification of Missouri counties based on 2008 population estimates. In total, 36 counties were classified as part of a metropolitan statistical area in 2008; 22 counties were classified as part of a micropolitan statistical area; and 57 counties were classified as nonmetropolitan areas.

Figure 2. Population by age and by sex, Missouri, 2000 and 2008

Source: U.S. Census Bureau, Population Estimates, 2008

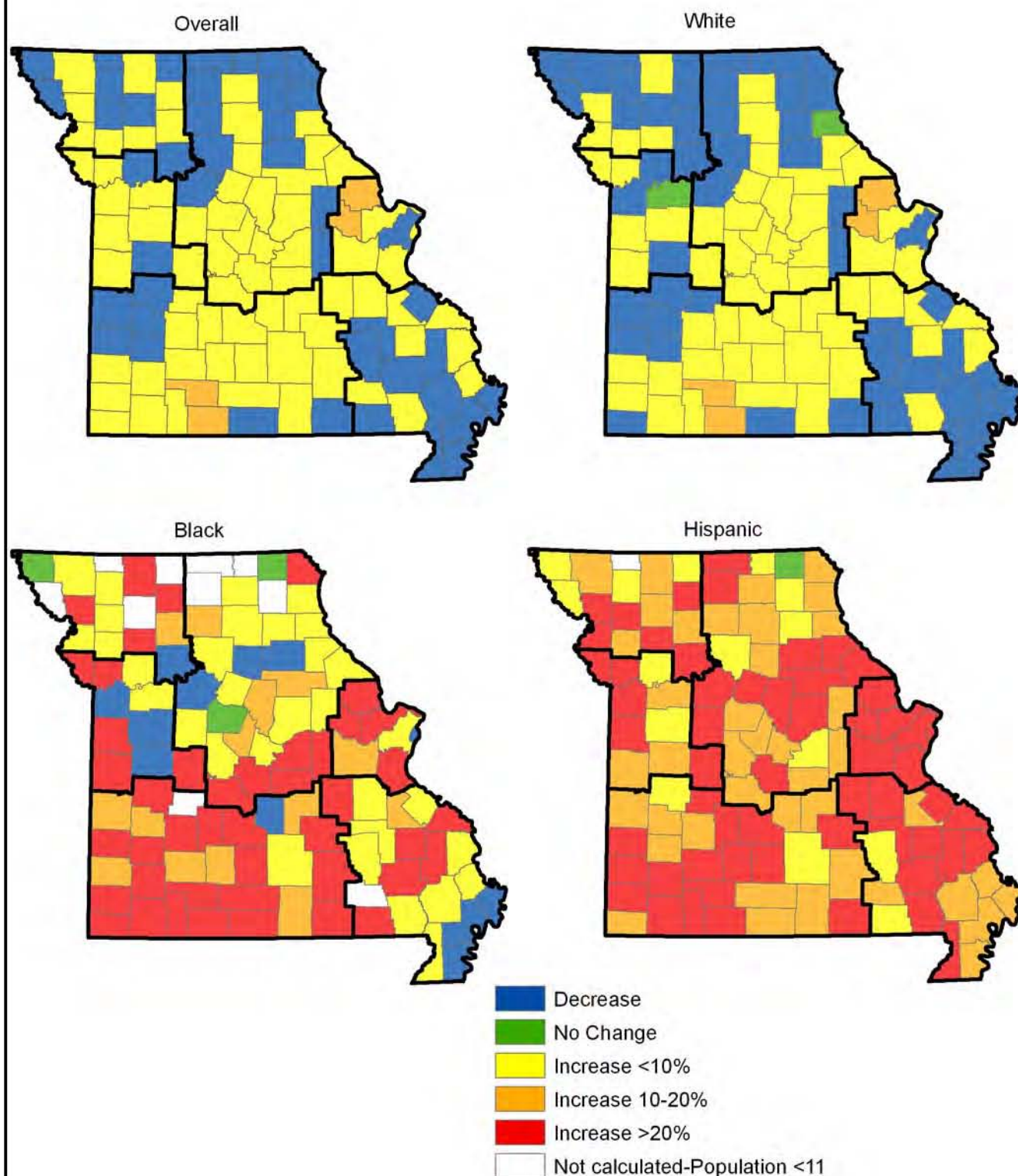
In 2008, the median age was 36.1 years old among Missouri males, and 38.9 years old among Missouri females. The median ages of males and females in Missouri were slightly higher than the median ages in the U.S. overall of 35.5 and 38.1 years of age for males and females, respectively. The distribution of the Missouri population by age among both males and females has shifted slightly between 2000 and 2008 (Figure 2). The number of both males and females between the ages of 45 and 69 was greater in 2008 compared to 2000. In both 2000 and 2008, there were a larger number of males between the ages of 0 and 19 compared to females. However, there tended to be a larger number of females 40 years of age or greater compared to males.

Table 1. Population change by race/ethnicity, Missouri, 2004-2008

Race/Ethnicity	2004	2005	2006	2007	2008	% Change 2004-2008
White	4,764,943	4,787,323	4,813,322	4,839,132	4,855,753	1.9%
Black	650,819	656,020	662,119	666,369	670,189	3.0%
Hispanic	153,056	161,999	171,960	181,520	189,700	23.9%
Asian/Pacific Islander	77,363	80,471	83,579	86,353	88,666	14.6%
American Indian or Alaskan Native	25,211	25,473	25,799	26,248	26,474	5.0%
Two or More Races in Combination	71,258	73,844	76,198	78,777	80,823	13.4%
Total	5,742,650	5,785,130	5,832,977	5,878,399	5,911,605	2.9%

Source: U.S. Census Bureau, Population Estimates, 2008

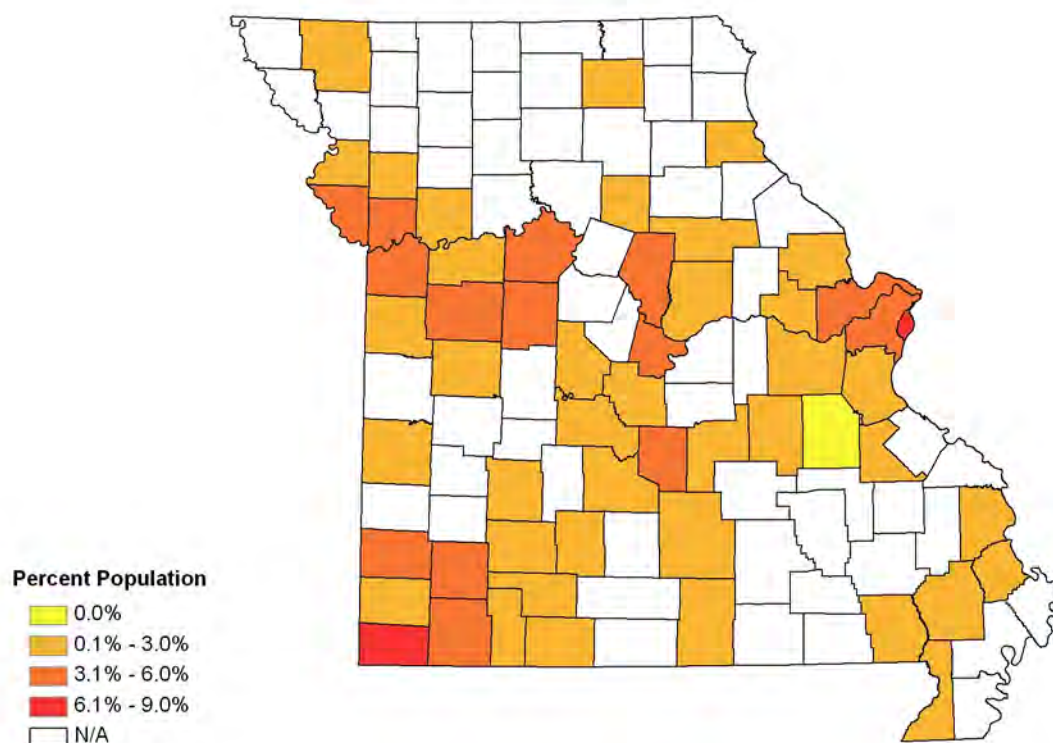
Whites represented the majority of the population in Missouri from 2004 to 2008. However, estimated population growth between 2004 and 2008 was greatest among Hispanics (Table 1). Asian/Pacific Islanders and persons of multiple races reported the second and third greatest percentage increase in population between 2004 and 2008, respectively. High rates of growth among particular populations may warrant attention when planning new disease prevention and outreach activities.

Figure 3. Percent population change* by county, overall and by race/ethnicity, Missouri, 2004-2008

Source: U.S. Census Bureau, Population Estimates, 2008

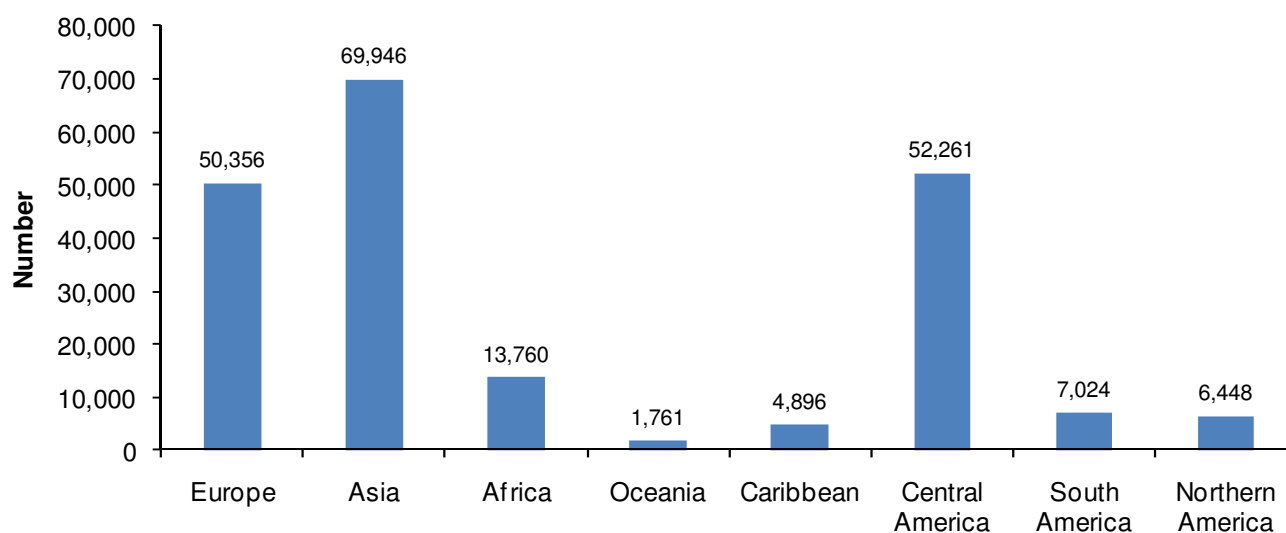
*Only calculated if the population was greater than 10 in both 2004 and 2008

There were four counties in which the overall population increased by 10% or more between 2004 and 2008 (Figure 3). Two counties were located in the St. Louis HIV region (Lincoln and Warren), and two were located in the Southwest HIV region (Christian and Taney). There were 43 counties where the overall estimated population decreased between 2004 and 2008. Population changes among whites tended to be similar to overall population changes. There were 44 counties where the black population was estimated to increase by more than 20% between 2004 and 2008. Many of the counties experiencing the large increase were located in the Southwest HIV region. Large increases in the Hispanic population were seen throughout the state.

Figure 4. Estimated percent population born outside of the U.S., by selected county, Missouri, 2006-2008

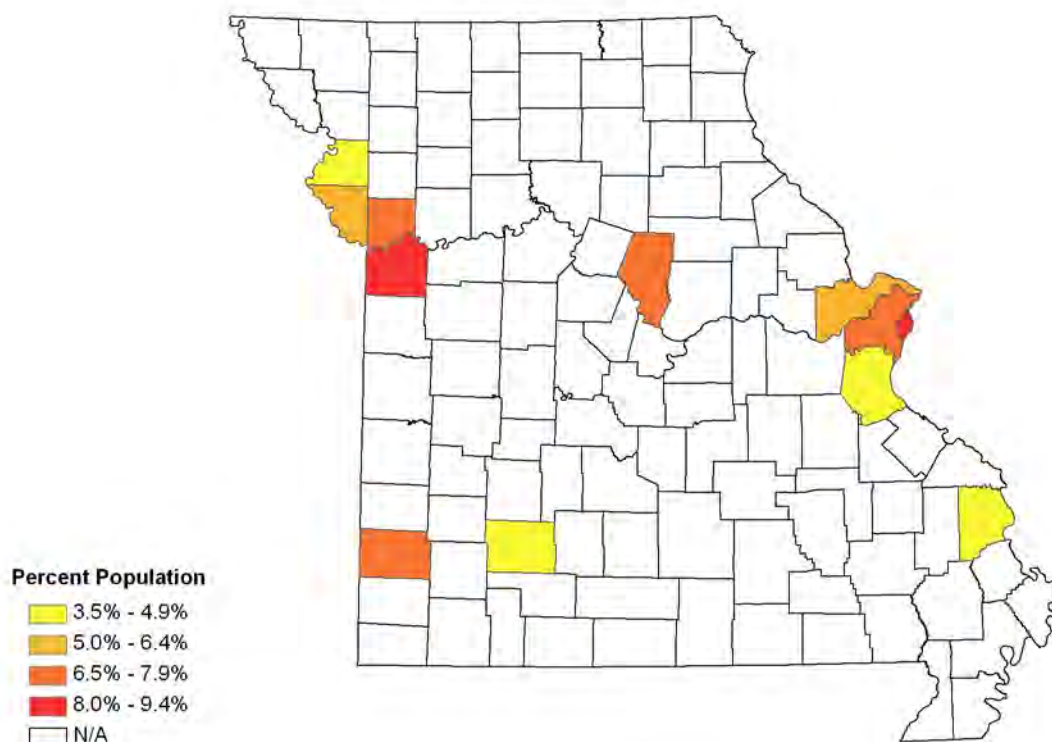
Source: U.S. Census Bureau, American Community Survey, 2006-2008

Overall, 4% of Missouri's population was born in a country outside of the U.S., according to 2006-2008 American Community Survey estimates. Estimates of the percent of the population born outside of the U.S. by county were available only for selected counties. Estimates ranged from 0% of the population born outside of the U.S. in Washington County to 8% in McDonald County (Figure 4).

Figure 5. Region of birth among persons born outside of the U.S., Missouri, 2006-2008

Source: U.S. Census Bureau, American Community Survey, 2006-2008

Among persons born outside of the U.S. who now currently reside in Missouri, the largest numbers were born in Asia (Figure 5). The three countries representing the largest number of births among persons born in Asia included India (13,505), China (12,918), and Vietnam (9,377). Central America represented the second largest region of birth among persons residing in Missouri. The majority of these persons were born in Mexico (42,306).

Figure 6. Estimated percent population five years of age or older speaking a language other than English at home, by selected county, Missouri, 2006-2008

Source: U.S. Census Bureau, American Community Survey, 2006-2008

Among Missourians five years of age or older, an estimated 6% spoke a language other than English at home, according to 2006-2008 American Community Survey estimates. Estimates of the percent of the population speaking a language other than English at home by county were available only for a few selected counties. Estimates of persons five years of age or older speaking a language other than English ranged from 4% in Cape Girardeau County and Jefferson County to 9% in St. Louis City (Figure 6).

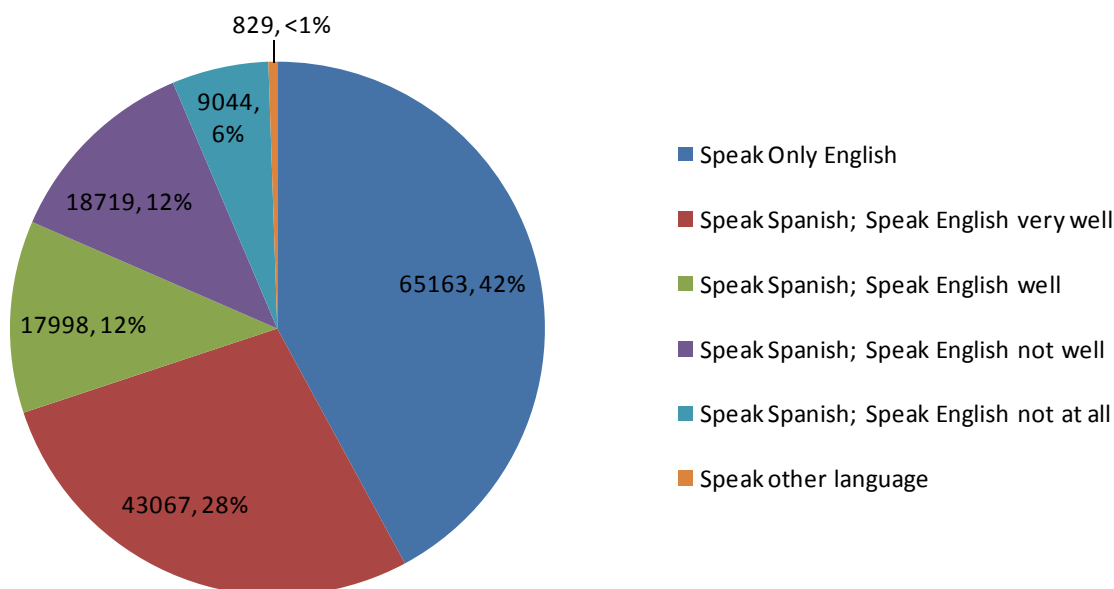
Table 2. Estimated population five years of age or older by the language spoken at home, Missouri, 2006-2008

Language	N	%
English Only	5,169,463	94.3%
Spanish or Spanish Creole	141,220	2.6%
French (including Patois, Creole, Cajun)	15,275	0.3%
German or other West Germanic languages	29,806	0.5%
Slavic languages	24,822	0.5%
Other Indo-European languages	28,169	0.5%
Korean	7,321	0.1%
Chinese	14,014	0.3%
Vietnamese	10,976	0.2%
Tagalog	5,680	0.1%
Other Asian or Pacific Island languages	16,294	0.3%
Other and unspecified languages	17,819	0.3%
MISSOURI TOTAL 5+ years of age	5,480,859	100.0%

Source: U.S. Census Bureau, American Community Survey, 2006-2008

The most common language spoken at home among Missourians five years of age or older, other than English, was Spanish or Spanish Creole (3%) (Table 2). Less than four percent of Missouri's population five years of age or older spoke a language other than English, Spanish, or Spanish Creole.

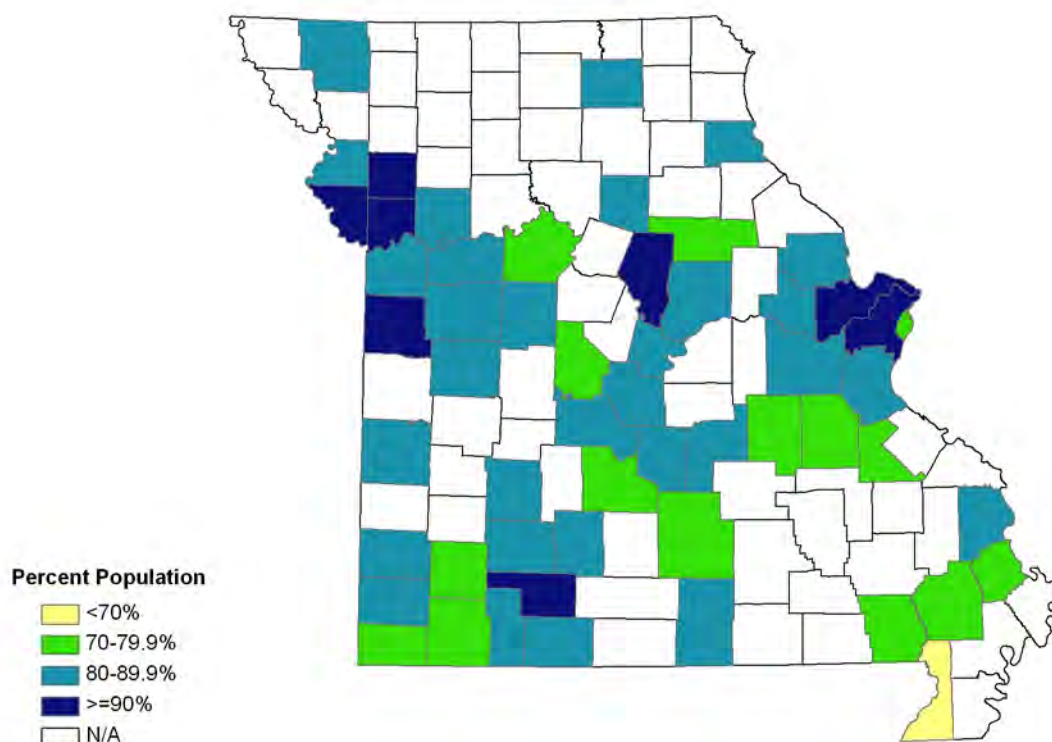
Figure 7. Estimated percent of Hispanic population five years of age or older, by language spoken at home and ability to speak English, , Missouri, 2006-2008



Source: U.S. Census Bureau, American Community Survey, 2006-2008

Among Missourians five years of age or older of Hispanic origin, an estimated 42% spoke only English at home; less than 1% spoke a language other than English or Spanish at home (Figure 7). Overall, an estimated 82% of persons of Hispanic origin identified being comfortable speaking English (i.e., spoke English well or better). An estimated 6% reported speaking Spanish at home, and were not able to speak English. An additional 12% spoke Spanish at home, and reported not being able to speak English well.

Figure 8. Estimated percent of population 25 years of age or older completing high school, high school equivalency, or higher, by selected county, Missouri, 2006-2008



Source: U.S. Census Bureau, American Community Survey, 2006-2008

An estimated 86% of Missourians 25 years of age or older have completed at least high school or a high school equivalency. Estimates by county were available only for selected counties. Estimates ranged from 69% of the population completing high school in Dunklin County to 95% in Platte County (Figure 8).

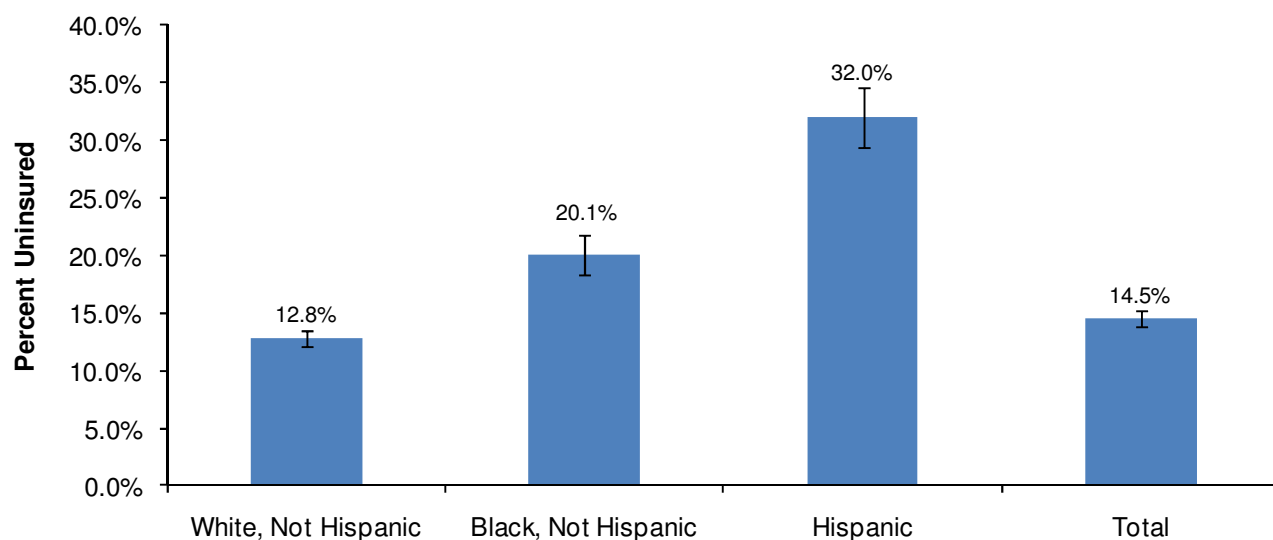
Table 3. Estimated highest educational attainment level, by sex, by race/ethnicity, Missouri, 2006-2008

Sex	Race/Ethnicity	Highest Educational Attainment Level			
		Less than high school diploma	High school graduate, GED, or alternative	Some college or associate's degree	Bachelor's degree or higher
Male	Total	14.6%	33.9%	26.5%	25.1%
	White*	13.6%	33.8%	26.6%	26.0%
	Black*	21.5%	37.5%	27.6%	13.4%
	Hispanic	35.0%	28.4%	20.4%	16.2%
Female	Total	14.2%	32.4%	29.3%	24.0%
	White*	13.3%	32.9%	29.0%	24.9%
	Black*	19.0%	31.0%	34.1%	15.9%
	Hispanic	31.0%	29.2%	22.4%	17.5%

Source: U.S. Census Bureau, American Community Survey, 2006-2008

*Includes persons of Hispanic origin

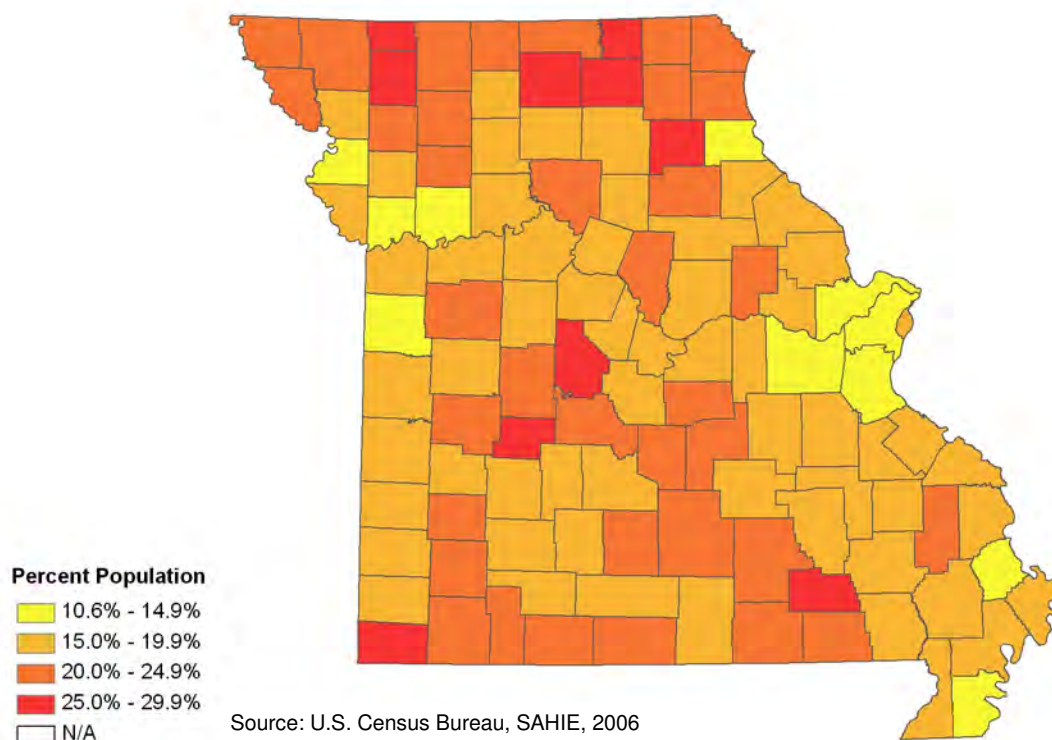
The distribution of the highest level of education attainment varied by race/ethnicity (Table 3). Greater proportions of white males and females completed a bachelor's degree or higher compared to black males and females. The percentage of the population with less than a high school diploma was greatest among Hispanic males (35%) and lowest among white females (13%).

Figure 9. Estimated percent of population less than 65 years of age with no health insurance, by race/ethnicity, Missouri, 2006

Source: U.S. Census Bureau, Small Area Health Insurance Estimates, 2006

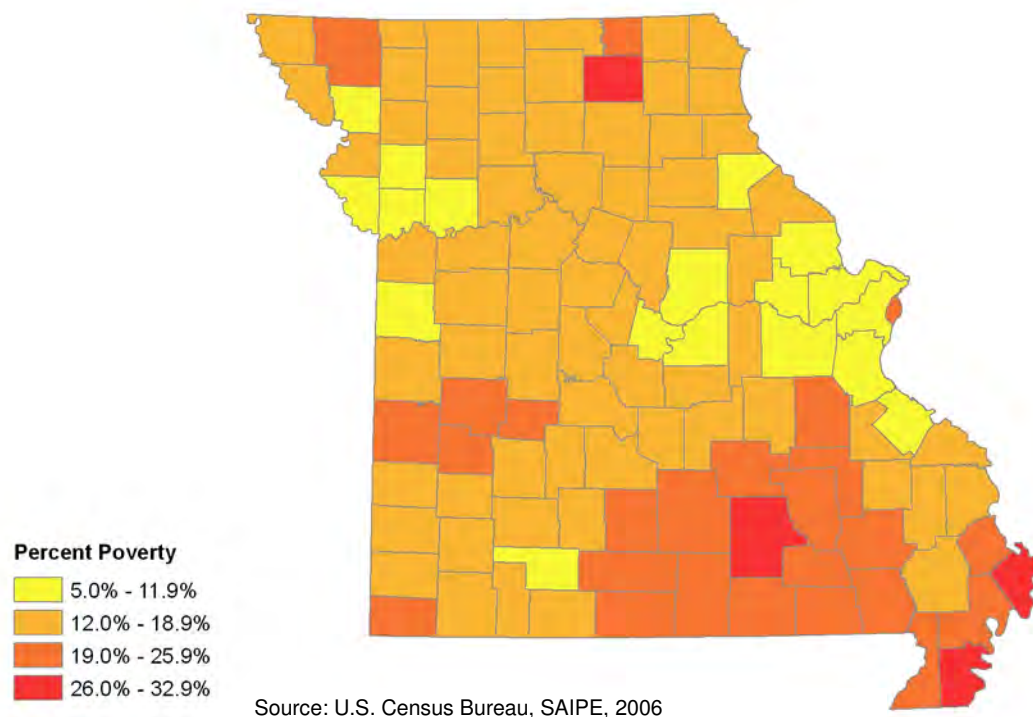
Overall, an estimated 15% of Missourians less than 65 years of age did not have health insurance in 2006 (Figure 9). The percentage of the population that was uninsured varied by race/ethnicity. The percentage of the population that was uninsured was greatest among Hispanics (32%), and lowest among whites (13%).

Figure 10. Estimated percent of population 18-64 years of age with no health insurance, by county, Missouri, 2006



An estimated 17% of Missourians ages 18 to 64 were without health insurance in 2006. Estimates of the percent of population 18-64 years of age with no health insurance ranged from 11% in St. Charles County to 29% in Worth County (Figure 10).

Figure 11. Estimated percent of population living in poverty, by county, Missouri, 2008



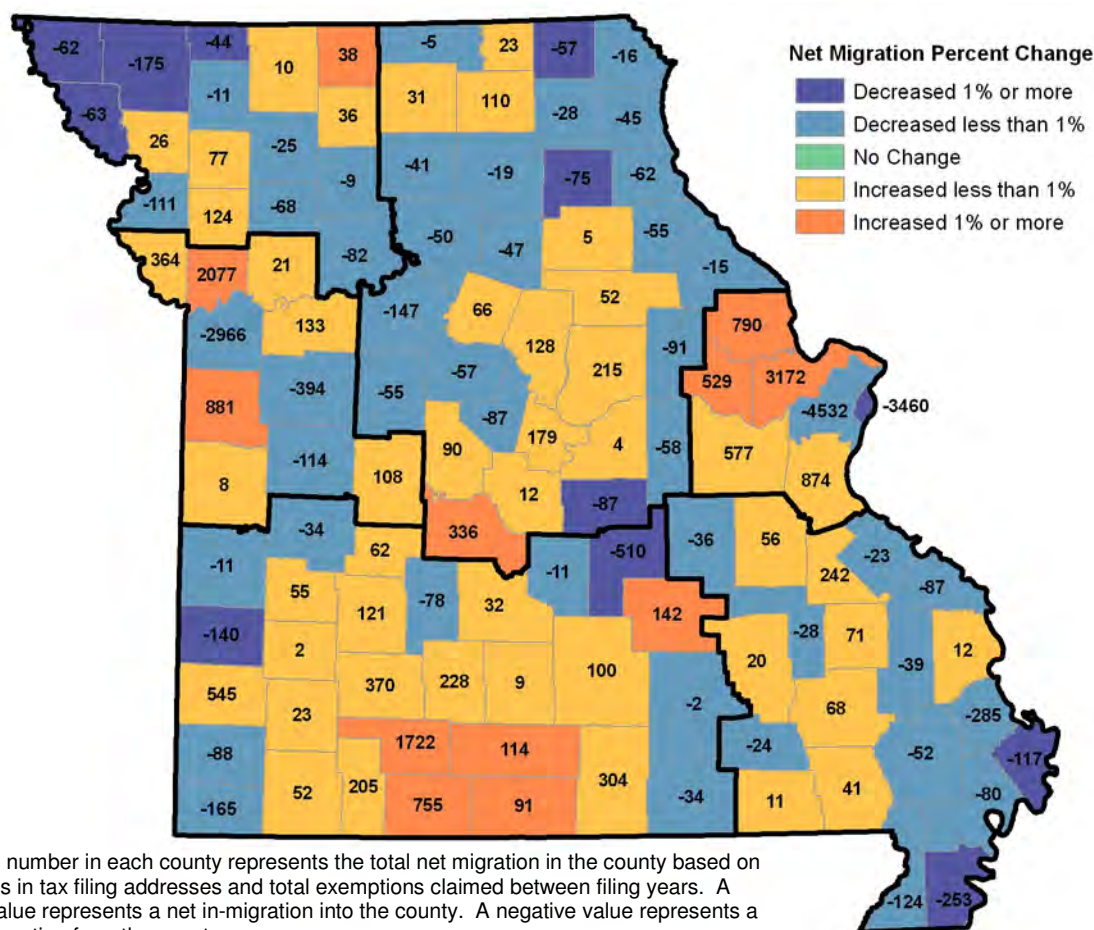
An estimated 14% of Missourians were living in poverty in 2008. Estimates of the percent of population living in poverty ranged from 5% in St. Charles County to 32% in Pemiscot County (Figure 11). Counties with the highest percentages of poverty were concentrated in the southeastern area of the state.

Table 4. Estimated unemployment rate by age, by race/ethnicity, by sex, by educational attainment, Missouri, 2006-2008

Ages Included in Measurement	Category	Unemployment rate	Margin of Error (+/-)
16+ years of age	Total	6.3%	0.1
	Age		
	16 to 19 years	20.1%	1.0
	20 to 24 years	10.3%	0.5
	25 to 44 years	5.5%	0.2
	45 to 54 years	4.6%	0.2
	55 to 64 years	3.5%	0.3
	65 to 74 years	3.6%	0.4
	75 years and over	3.5%	0.9
	Race/Ethnicity		
	White*	5.2%	0.1
20-64 years of age	Black*	14.2%	0.7
	Hispanic	8.2%	0.8
	Total	5.5%	0.1
	Sex		
	Male	5.7%	0.2
	Female	5.4%	0.2
	Females with own children under 6 years	7.4%	0.5
25-64 years of age	Total	4.9%	0.1
	Educational Attainment		
	Less than high school graduate	10.9%	0.6
	High school graduate (or equivalency)	6.1%	0.3
	Some college or associate's degree	4.6%	0.2
	Bachelor's degree or higher	2.2%	0.2
Source: U.S. Census Bureau, American Community Survey, 2006-2008			
*Includes persons of Hispanic origin			

An estimated 6% of Missourians 16 years of age or older were unemployed, according to 2006-2008 American Community Survey estimates (Table 4). The unemployment rate generally decreased with increasing age. Among persons 20 to 64 years of age, the unemployment rate was similar between males and females. However, the unemployment rate was greater for females with their own children under the age of six. Unemployment rates decreased with increasing educational attainment among persons 25 to 64 years of age.

Figure 12. Net migration and percent change in migration based on IRS tax returns, by county, Missouri, 2007-2008



Note: The number in each county represents the total net migration in the county based on differences in tax filing addresses and total exemptions claimed between filing years. A positive value represents a net in-migration into the county. A negative value represents a net out-migration from the county.

Source: IRS Migration Files, 2007-2008

Overall in Missouri, there was a net increase in migration into the state between 2007 and 2008 of 1,115 based on the number of exemptions filed on IRS returns. The increased in-migration into Missouri was due to a net in-migration of individuals from foreign countries between 2007 and 2008 (1,853). There was a net out-migration of Missouri residents to other U.S. states between 2007 and 2008 (-738).

Among the counties in Missouri, 12 experienced a net out-migration of the population of 1% or more; 45 had a net out-migration of less than 1%; 46 had a net in-migration of less than 1%; and 12 had a net in-migration of 1% or more (Figure 12). The Northwest HIV region had the greatest number of counties with a net out-migration of 1% or more (4). The Southwest HIV region had the greatest number of counties with a net in-migration of 1% or more (5).

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Key Highlights: What is the scope of the HIV/AIDS epidemic in Missouri?

Magnitude of the Problem and General Trends

- From 1982 to 2009, there have been a total of 17,356 persons diagnosed with HIV disease in Missouri and reported to MDHSS. Of these individuals, 11,972 (69%) were subcategorized as AIDS cases, and the remaining 5,384 (31%) were subcategorized as HIV cases. Of the cumulative number of persons diagnosed with HIV disease, 11,122 (64%) were presumed to be living at the end of 2009.
- The number of new diagnoses has fluctuated slightly between 2000 and 2009, with no sustained upward or downward trend in new HIV diagnoses over this time period. In 2009, there were 536 persons newly diagnosed with HIV disease. However, this value has not been adjusted for reporting delays, and therefore is likely to change.
- The number of persons living with HIV disease continued to increase every year, from 7,466 persons in 2000 to 11,122 persons in 2009. The increase is primarily due to the fact that individuals are living longer with the disease as a result of improved treatment and medical care.

Where

- HIV disease disproportionately impacts the state's two major metropolitan areas (St. Louis and Kansas City). The highest rates of new diagnoses and persons living with HIV disease, as well as the largest numbers of cases, were found in these two areas.
- The rate of persons newly diagnosed who remained classified as HIV cases at the end of 2009 was highest in St. Louis City (25.1 per 100,000). The second highest rate was in Kansas City (18.5 per 100,000). The rate of persons newly diagnosed who were classified as AIDS cases at the end of 2009 was highest in St. Louis City (10.7 per 100,000), and second highest in Kansas City (6.9 per 100,000).

Who

Sex

- Males represented the majority of persons newly diagnosed (83%) and living with (83%) HIV disease. The rates of new diagnoses and persons living with HIV disease were more than five times greater among males than females.

Race/Ethnicity

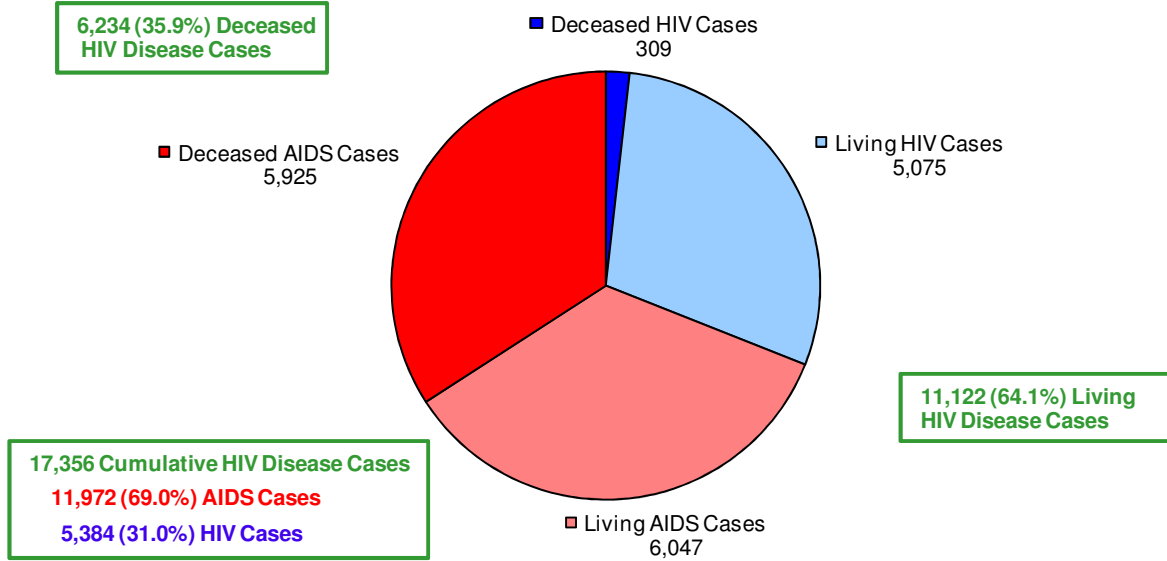
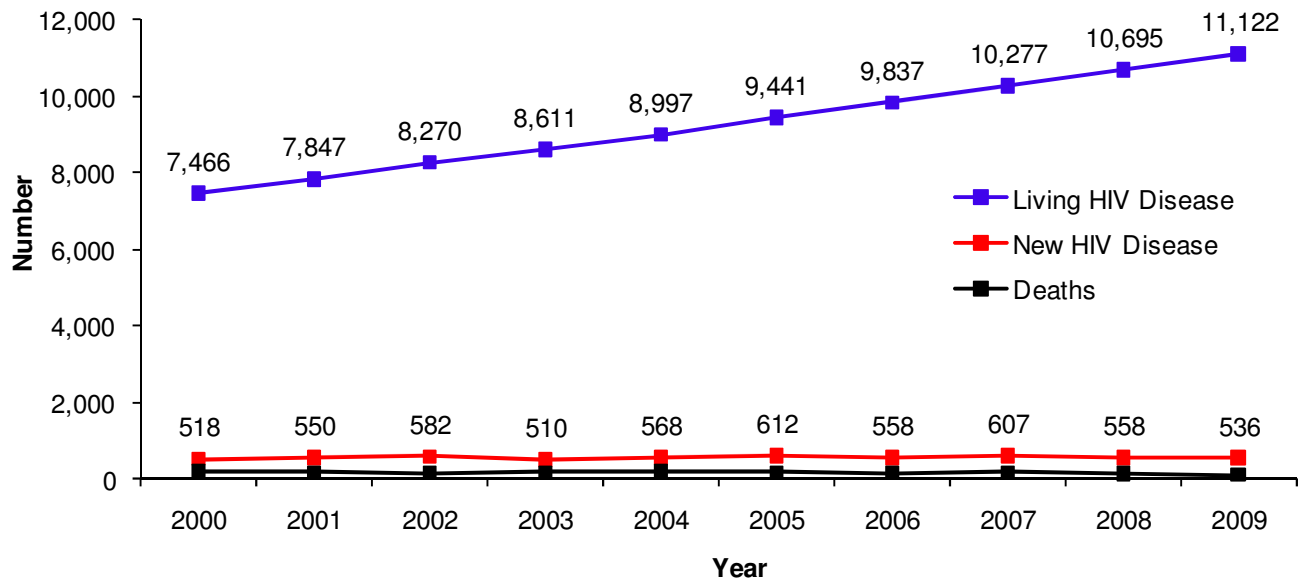
- HIV disease continues to disproportionately impact minorities. The rate of newly diagnosed HIV disease cases was 9.8 times greater among blacks than whites, and 2.5 times greater among Hispanics than whites. The disparity was even greater among black females. While black females represented only 12% of Missouri's female population, black females accounted for 75% of new female HIV diagnoses. It should be emphasized that race/ethnicity in itself is not a risk factor for HIV infection; however, among many racial/ethnic minority populations, social, economic, and cultural factors are associated with high rates of HIV risk behavior. These factors also may be barriers to receiving HIV prevention information or accessing HIV testing, diagnosis, and treatment.

Age

- The age of individuals living with HIV disease has increased over time. In 2000, the largest numbers of persons living with HIV disease were 35-39 years of age, whereas in 2009 persons 45-49 years old represented the largest number of living cases.
- Although the age of persons living with the disease has increased over time, the age of new diagnoses has decreased. In 2009, the largest numbers of persons newly diagnosed with HIV disease were between 19-24 years of age, compared to 2000 when the largest numbers of new diagnoses were 35-39 years of age. The difference may be attributed to increased testing among younger individuals or due to a true increase in the number of new infections at a younger age.

Exposure Category

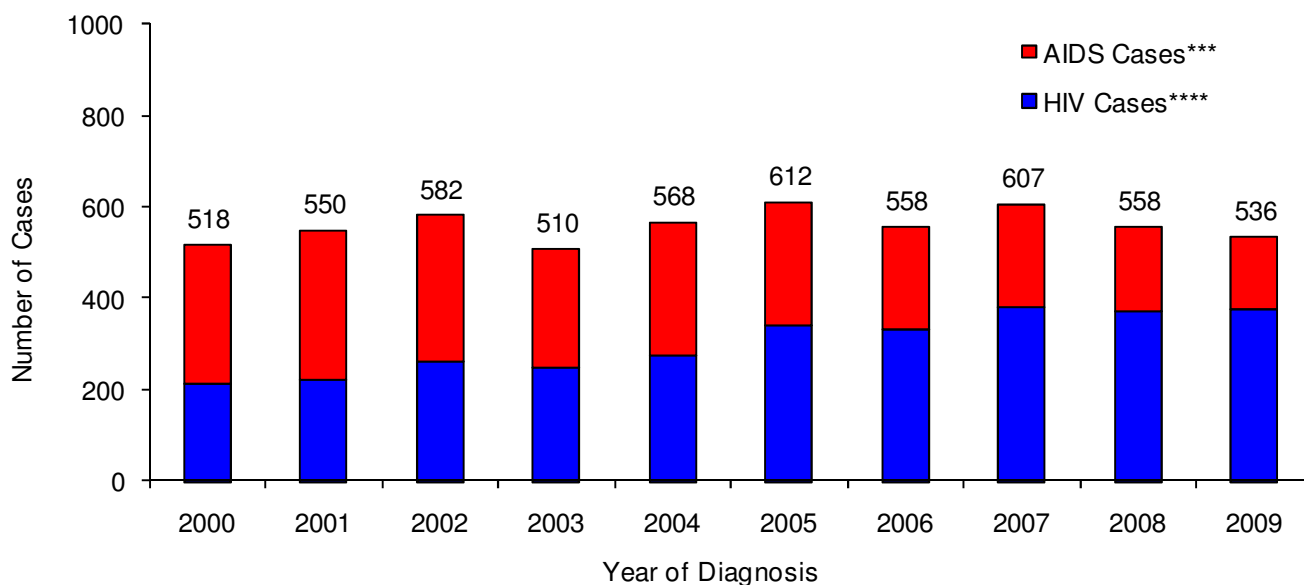
- The majority of new diagnoses continue to be attributed to men who have sex with men. Among females, heterosexual contact was the primary mode of transmission. In 2009, there was one person less than 13 years of age diagnosed with HIV disease.

Figure 13. HIV disease cases (living and deceased), by current HIV vs. AIDS status, Missouri, 1982—2009**Figure 14. Living and new HIV disease cases and deaths by year*, Missouri, 2000—2009**

*For living HIV disease cases-the number of individuals living with HIV disease at the end of the year; For new HIV disease cases-the number of individuals newly diagnosed in the year; For HIV disease deaths-the number of individuals that died in the year.

From 1982 to 2009, there have been a total of 17,356 HIV disease cases diagnosed in Missouri and reported to MDHSS (Figure 13). Of the cumulative cases reported, 64% were still presumed to be living with HIV disease at the end of 2009. Among those living with HIV disease, 5,075 were classified as HIV cases at the end of 2009 and 6,047 were classified as AIDS cases.

At the end of 2009, there were 11,122 persons living with HIV disease whose most recent diagnosis occurred in Missouri (Figure 14). The number of people living with HIV disease increased each year. There were 536 new HIV disease diagnoses in 2009. The number of new diagnoses from 2005 to 2009 has fluctuated. The lower number of diagnosed cases in 2009 should be interpreted with caution as the data have not been adjusted for reporting delays. The number of deaths among persons with HIV disease each year has remained generally steady. The lower number of deaths in 2009 was likely due to delays in death reporting.

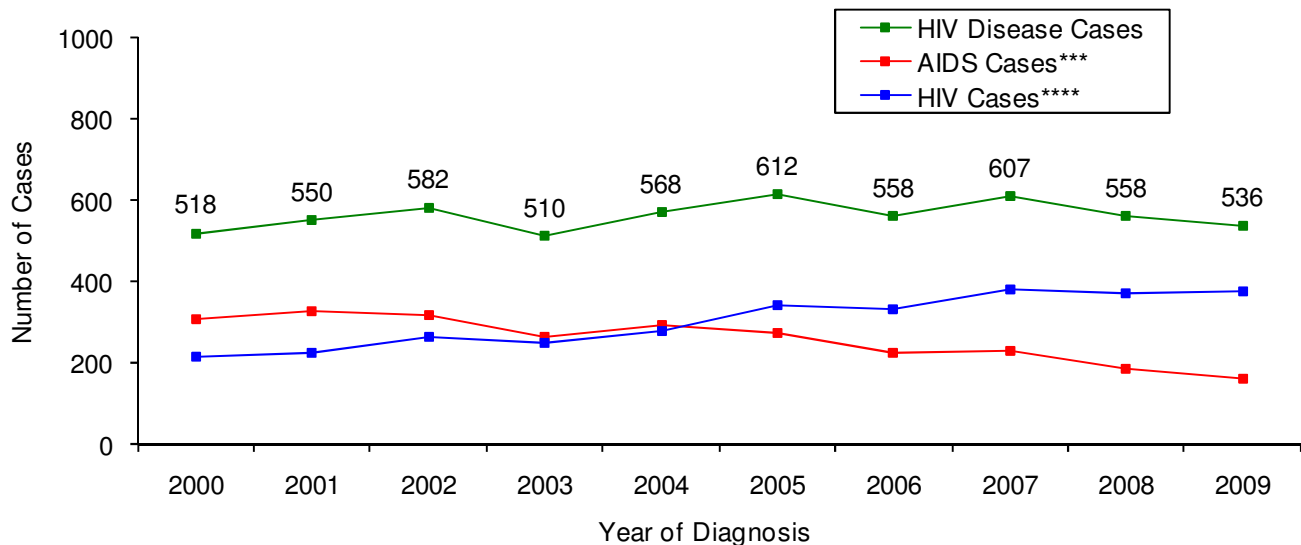
Figure 15. HIV disease cases, by current status* and year of diagnosis, Missouri, 2000-2009**

*HIV case vs. AIDS case

**Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2009.

Figure 16. Reported HIV disease cases, by current status* and year of diagnosis, Missouri, 2000-2009**

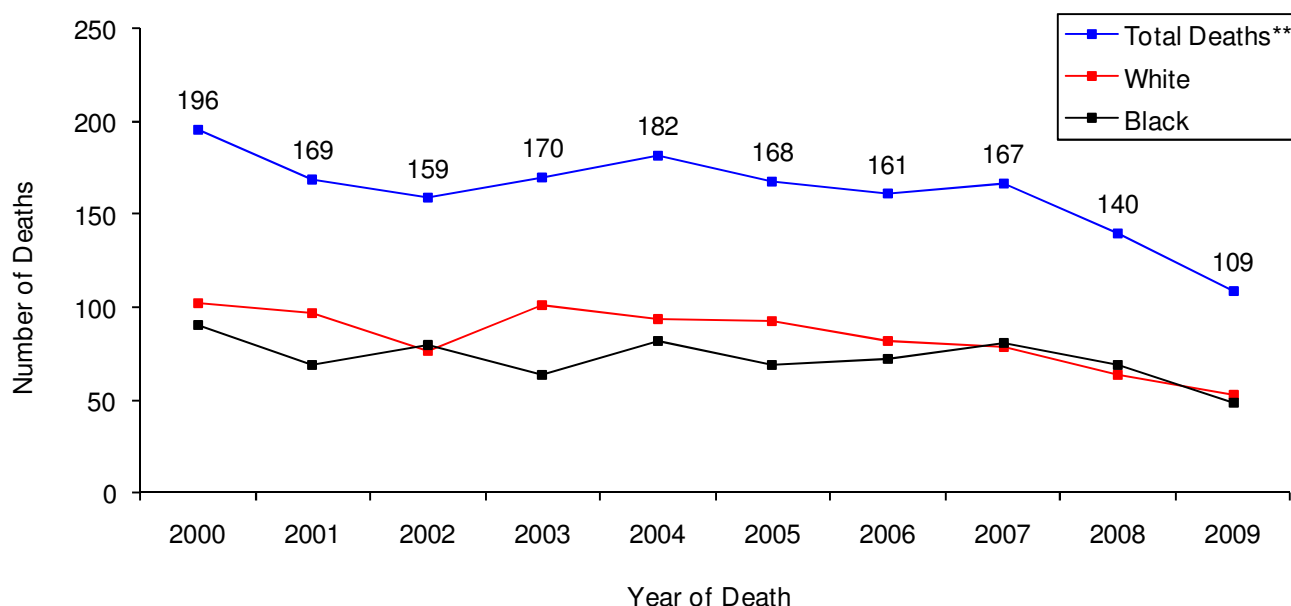
*HIV case vs. AIDS case

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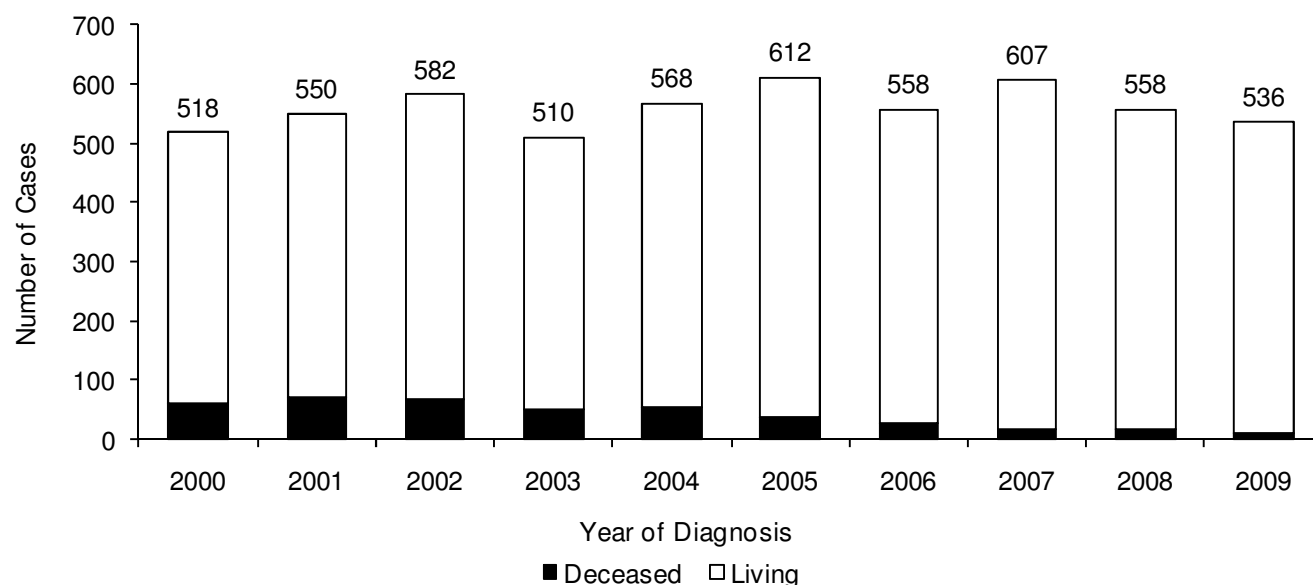
Between 2000 and 2009, the number of new HIV disease diagnoses has ranged from 510 cases in 2003, to 612 cases in 2005 (Figures 15 and 16). The number of new diagnoses has fluctuated slightly between 2000 and 2009, with no sustained upward or downward trend in new HIV diagnoses over this time period. Differences in the number of persons sub-classified as AIDS cases each year are due to the progression of the disease over time. For those diagnosed with HIV disease in 2000, a larger number are currently classified as AIDS cases compared to those diagnosed in 2008 because they have been living with the virus longer.

Figure 17. HIV disease deaths*, by selected race, by year of death, Missouri, 2000—2009**

*Includes deaths that have occurred among those diagnosed with HIV disease in Missouri.

**Total deaths include persons of all races.

†Only includes deaths through December 31, 2009, and reported by February 28, 2010.

Figure 18. Persons diagnosed with HIV disease by current vital status* and year of diagnosis, Missouri, 2000—2009**

*Vital status on December 31, 2009.

**Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

The number of deaths among persons with HIV disease has generally decreased from 2004-2009 (Figure 17). The lower number of deaths in 2009 was likely due to delays in death reporting. The general decrease in the number of deaths over time is likely related to the use of highly active antiretroviral therapy (HAART).

Of the 518 persons diagnosed with HIV disease in 2000, 62 (12%) were deceased by the end of 2009 (Figure 18). Among the 536 cases first diagnosed in 2009, 9 (2%) were deceased at the end of 2009. The difference in the proportion of cases that are deceased is due to the length of time individuals have been living with the disease.

Table 5. Living[†] HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and by current age, Missouri, 2009

	HIV*			AIDS**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	4,151	81.8%	143.7	5,121	84.7%	177.3	9,272	83.4%	321.1
Female	924	18.2%	30.6	926	15.3%	30.6	1,850	16.6%	61.2
Total	5,075	100.0%	85.8	6,047	100.0%	102.3	11,122	100.0%	188.1
Race/Ethnicity									
White	2,546	50.2%	52.4	3,140	51.9%	64.7	5,686	51.1%	117.1
Black	2,257	44.5%	336.8	2,632	43.5%	392.7	4,889	44.0%	729.5
Hispanic	194	3.8%	102.3	208	3.4%	109.6	402	3.6%	211.9
Asian/Pacific Islander	31	0.6%	35.0	19	0.3%	21.4	50	0.4%	56.4
American Indian/Alaskan Native	6	0.1%	22.7	13	0.2%	49.1	19	0.2%	71.8
Two or More Races/Unknown	41	0.8%	--	35	0.6%	--	76	0.7%	--
Total	5,075	100.0%	85.8	6,047	100.0%	102.3	11,122	100.0%	188.1
Race/Ethnicity-Males									
White Male	2,221	53.5%	93.4	2,843	55.5%	119.6	5,064	54.6%	213.0
Black Male	1,707	41.1%	542.6	2,043	39.9%	649.5	3,750	40.4%	1192.1
Hispanic Male	158	3.8%	157.9	181	3.5%	180.9	339	3.7%	338.9
Asian/Pacific Islander Male	25	0.6%	58.2	13	0.3%	30.3	38	0.4%	88.4
American Indian/Alaskan Native Male	6	0.1%	44.8	12	0.2%	89.6	18	0.2%	134.3
Two or More Races/Unknown Male	34	0.8%	--	29	0.6%	--	63	0.7%	--
Total	4,151	100.0%	143.7	5,121	100.0%	177.3	9,272	100.0%	321.1
Race/Ethnicity-Females									
White Female	325	35.2%	13.1	297	32.1%	12.0	622	33.6%	25.1
Black Female	550	59.5%	154.7	589	63.6%	165.6	1,139	61.6%	320.3
Hispanic Female	36	3.9%	40.1	27	2.9%	30.1	63	3.4%	70.3
Asian/Pacific Islander Female	6	0.6%	13.1	6	0.6%	13.1	12	0.6%	26.3
American Indian/Alaskan Native Female	0	0.0%	0.0	1	0.1%	7.6	1	0.1%	7.6
Two or More Races/Unknown Female	7	0.8%	--	6	0.6%	--	13	0.7%	--
Total	924	100.0%	30.6	926	100.0%	30.6	1,850	100.0%	61.2
Current Age[‡]									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	32	0.6%	3.8	3	0.0%	0.4	35	0.3%	4.1
13-18	44	0.9%	9.0	16	0.3%	3.3	60	0.5%	12.2
19-24	342	6.7%	71.3	105	1.7%	21.9	447	4.0%	93.1
25-44	2,549	50.2%	162.4	2,382	39.4%	151.8	4,931	44.3%	314.2
45-64	1,959	38.6%	126.0	3,287	54.4%	211.4	5,246	47.2%	337.4
65+	149	2.9%	18.5	254	4.2%	31.5	403	3.6%	50.0
Total	5,075	100.0%	85.8	6,047	100.0%	102.3	11,122	100.0%	188.1

[†]Includes persons diagnosed with HIV disease in Missouri who are currently living, regardless of current residence. Includes persons diagnosed in Missouri correctional facilities.

*Cases which remained HIV cases at the end of 2009.

**Cases classified as AIDS by December 31, 2009.

***The sum of HIV cases and AIDS cases.

****Per 100,000 population based on 2008 MDHSS estimates.

[‡]Based on age as of December 31, 2009.

Note: Percentages may not total due to rounding.

Table 6. Diagnosed HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and current age, Missouri, 2009

	HIV*			AIDS**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	315	84.0%	10.9	129	80.1%	4.5	444	82.8%	15.4
Female	60	16.0%	2.0	32	19.9%	1.1	92	17.2%	3.0
Total	375	100.0%	6.3	161	100.0%	2.7	536	100.0%	9.1
Race/Ethnicity									
White	153	40.8%	3.2	61	37.9%	1.3	214	39.9%	4.4
Black	196	52.3%	29.2	92	57.1%	13.7	288	53.7%	43.0
Hispanic	15	4.0%	7.9	6	3.7%	3.2	21	3.9%	11.1
Asian/Pacific Islander	2	0.5%	2.3	1	0.6%	1.1	3	0.6%	3.4
American Indian/Alaskan Native	2	0.5%	7.6	0	0.0%	0.0	2	0.4%	7.6
Two or More Races/Unknown	7	1.9%	--	1	0.6%	--	8	1.5%	--
Total	375	100.0%	6.3	161	100.0%	2.7	536	100.0%	9.1
Race/Ethnicity-Males									
White Male	141	44.8%	5.9	54	41.9%	2.3	195	43.9%	8.2
Black Male	150	47.6%	47.7	69	53.5%	21.9	219	49.3%	69.6
Hispanic Male	13	4.1%	13.0	4	3.1%	4.0	17	3.8%	17.0
Asian/Pacific Islander Male	2	0.6%	4.7	1	0.8%	2.3	3	0.7%	7.0
American Indian/Alaskan Native Male	2	0.6%	14.9	0	0.0%	0.0	2	0.5%	14.9
Two or More Races/Unknown Male	7	2.2%	--	1	0.8%	--	8	1.8%	--
Total	315	100.0%	10.9	129	100.0%	4.5	444	100.0%	15.4
Race/Ethnicity-Females									
White Female	12	20.0%	0.5	7	21.9%	0.3	19	20.7%	0.8
Black Female	46	76.7%	12.9	23	71.9%	6.5	69	75.0%	19.4
Hispanic Female	2	3.3%	2.2	2	6.3%	2.2	4	4.3%	4.5
Asian/Pacific Islander Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	60	100.0%	2.0	32	100.0%	1.1	92	100.0%	3.0
Current Age†									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	1	0.3%	0.1	0	0.0%	0.0	1	0.2%	0.1
13-18	20	5.3%	4.1	1	0.6%	0.2	21	3.9%	4.3
19-24	102	27.2%	21.3	18	11.2%	3.8	120	22.4%	25.0
25-44	209	55.7%	13.3	71	44.1%	4.5	280	52.2%	17.8
45-64	42	11.2%	2.7	63	39.1%	4.1	105	19.6%	6.8
65+	1	0.3%	0.1	8	5.0%	1.0	9	1.7%	1.1
Total	375	100.0%	6.3	161	100.0%	2.7	536	100.0%	9.1

*HIV cases diagnosed during 2009 which remained HIV cases at the end of the year. Includes persons diagnosed in Missouri correctional facilities.

**AIDS cases initially diagnosed in 2009.

***The sum of newly diagnosed HIV cases and newly diagnosed AIDS cases. Does not include cases diagnosed prior to 2009 with HIV, which progressed to AIDS in 2009.

****Per 100,000 population based on 2008 MDHSS estimates.

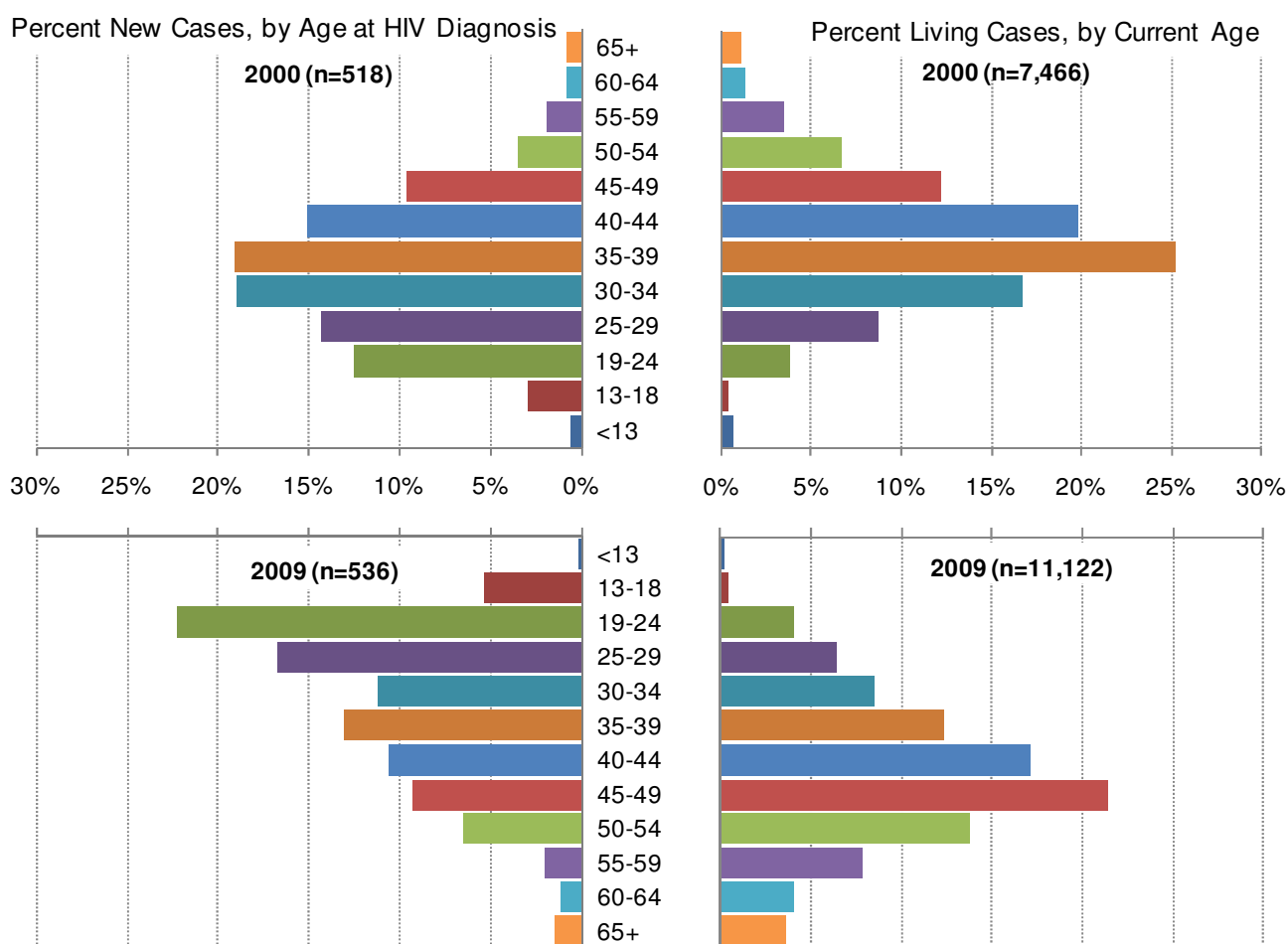
†Based on age as of December 31, 2009.

Note: Percentages may not total due to rounding.

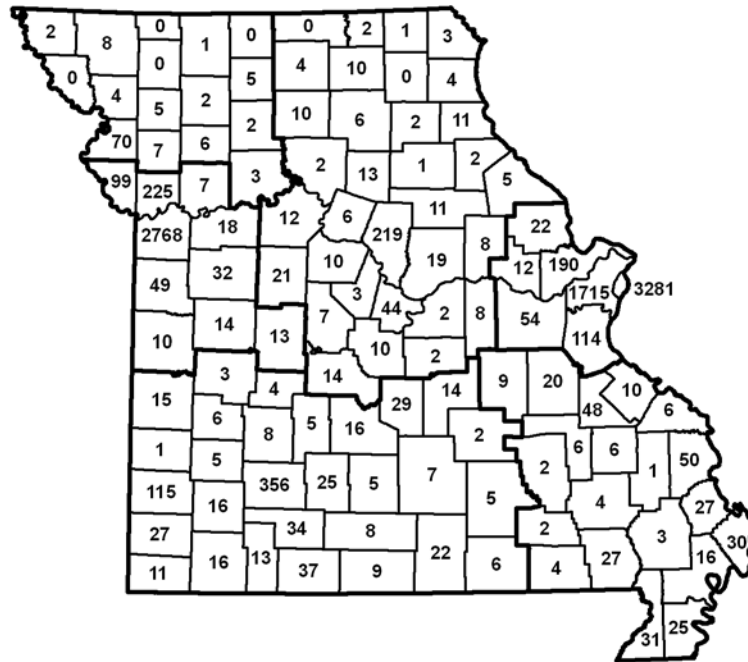
Of the 11,122 persons living with HIV at the end of 2009, 83% were males (Table 5). The rate of those living with HIV disease was 5.2 times greater among males than females. Although whites represented the largest proportion of living HIV disease cases (51%), the rate of those living with HIV disease was 6.2 times greater among blacks than whites. The rate was 1.8 times greater among Hispanics than whites. Among males, the rate of living cases was 5.6 times greater for blacks than whites, and 1.6 times greater for Hispanics than whites. Among females, the rate of those living with HIV disease was 12.8 times greater among blacks than whites, and 2.8 times greater among Hispanics than whites.

Of the 536 persons newly diagnosed with HIV disease in 2009, 30% were classified as AIDS cases by the end of 2009 (Table 6). The rate of new HIV disease diagnoses was 5.1 times greater among males than females. Females represented a greater proportion of the newly diagnosed AIDS cases (20%) compared to the newly diagnosed HIV cases (16%). A greater proportion of the new AIDS cases occurred among blacks compared to new HIV cases. The rate of new HIV disease cases was 9.8 times greater among blacks than whites, and 2.5 times greater in Hispanics than whites.

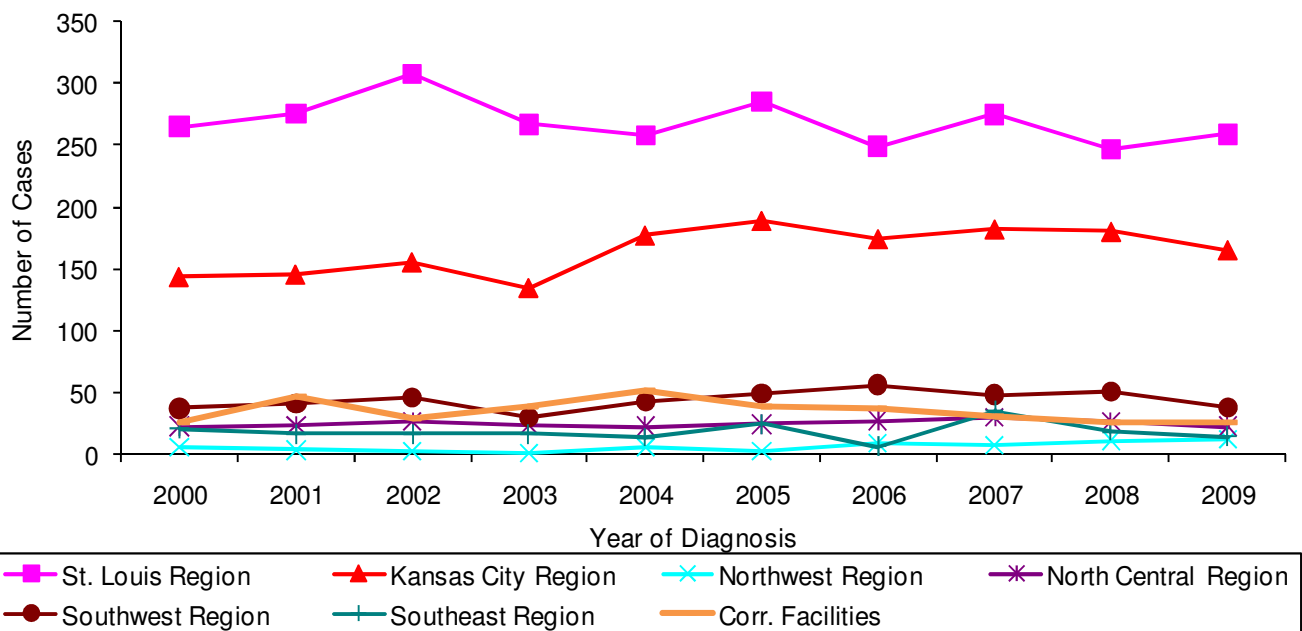
Figure 19. Distribution of new HIV disease cases by age at diagnosis and living HIV disease cases by current age in selected year, Missouri, 2000 and 2009



Changes have occurred in the distribution of the age at diagnosis among new HIV disease cases over time (Figure 19). In 2000, the greatest proportion of new diagnoses occurred among those ages 30-34 (19%) and 35-39 (19%). In 2009, the greatest proportion of new diagnoses occurred among those ages 19-24 (22%) and 25-29 (17%). Although the age of new diagnoses has decreased, the age of individuals living with HIV has increased over time. In 2000, the greatest proportion of living cases was between 35-39 years of age (25%). In 2009, the greatest proportion of living cases was between 45-49 years old (21%).

Figure 20. Number of persons living with HIV disease by county of residence* and HIV region at time of diagnosis, Missouri, 1982-2009

*Based on residence at time of most recent diagnosis of HIV or AIDS. Excludes persons diagnosed in Missouri correctional facilities (n=765).

Figure 21. Persons diagnosed with HIV disease by HIV region at time of diagnosis, Missouri, 2000-2009

The largest numbers of persons living with HIV disease in 2009 were most recently diagnosed in St. Louis City (3,281), Jackson County (2,768) and St. Louis County (1,715) (Figure 20). The St. Louis HIV region has represented the largest number of new HIV disease diagnoses in each year from 2000-2009 (Figure 21). The number of new diagnoses in the St. Louis, North Central, and Southeast HIV regions has remained generally steady, with slight fluctuations. The number of new HIV disease diagnoses each year from 2005 to 2009 has been higher than from 2000 to 2004 in the Kansas City HIV region. In the Southwest HIV region, the number of new diagnoses in each year between 2005 and 2008 was higher than in each year between 2000 and 2004. There was a decrease in the number of new diagnoses in 2009 in the Southwest HIV region. The number of new HIV diagnoses in the Northwest HIV region has been higher each year from 2006 to 2009 compared to new diagnoses between 2000 and 2005.

Table 7. New and living HIV and AIDS cases and rates, by geographic area, and by HIV region, Missouri, 2009

Location	HIV Cases						AIDS Cases					
	Diagnosed 2009*			Living with HIV			Diagnosed 2009**			Living with AIDS		
	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***
Geographic Area												
St. Louis City†	89	23.7%	25.1	1,530	30.1%	431.8	38	23.6%	10.7	1,751	29.0%	494.1
St. Louis County†	68	18.1%	6.9	814	16.0%	82.1	31	19.3%	3.1	901	14.9%	90.8
Kansas City†	89	23.7%	18.5	1,093	21.5%	227.5	33	20.5%	6.9	1,391	23.0%	289.5
Outstate†	107	28.5%	2.6	1,271	25.0%	31.1	55	34.2%	1.3	1,606	26.6%	39.3
Missouri Correctional Facilities††	22	5.9%	N/A	367	7.2%	N/A	4	2.5%	N/A	398	6.6%	N/A
Total	375	100.0%	6.3	5,075	100.0%	85.8	161	100.0%	2.7	6,047	100.0%	102.3
HIV Region												
St. Louis HIV Region†	180	48.0%	8.6	2,532	49.9%	120.7	79	49.1%	3.8	2,856	47.2%	136.1
Kansas City HIV Region†	114	30.4%	9.2	1,375	27.1%	111.4	51	31.7%	4.1	1,860	30.8%	150.7
Northwest HIV Region†	9	2.4%	3.7	50	1.0%	20.4	3	1.9%	1.2	65	1.1%	26.6
North Central HIV Region†	13	3.5%	1.8	208	4.1%	28.1	9	5.6%	1.2	264	4.4%	35.6
Southwest HIV Region†	26	6.9%	2.3	394	7.8%	35.6	12	7.5%	1.1	426	7.0%	38.5
Southeast HIV Region†	11	2.9%	2.3	149	2.9%	30.6	3	1.9%	0.6	178	2.9%	36.6
Missouri Correctional Facilities††	22	5.9%	N/A	367	7.2%	N/A	4	2.5%	N/A	398	6.6%	N/A
MISSOURI	375	100.0%	6.3	5,075	100.0%	85.8	161	100.0%	2.7	6,047	100.0%	102.3

*HIV cases diagnosed and reported to the Department during 2009 which remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

***Per 100,000 population based on 2008 MDHSS estimates.

†Does not include persons diagnosed in Missouri correctional facilities.

††Includes persons diagnosed in Missouri correctional facilities.

Note: Percentages may not total due to rounding.

There were differences in the proportion of persons newly diagnosed with HIV disease that were either concurrently diagnosed with AIDS or progressed to AIDS at the end of 2009 by geographic area and HIV region (Table 7). In Outstate, 34% of newly diagnosed HIV disease cases progressed to AIDS at the end of 2009. In comparison, the proportion was 31%, 30%, 27%, and 15% for St. Louis County, St. Louis City, Kansas City, Missouri correctional facilities, respectively. Similar trends were also seen among the HIV regions. In the North Central HIV region, 41% of newly diagnosed HIV disease cases progressed to AIDS at the end of 2009. Whereas the proportion was 32%, 31%, 31%, 25%, 21%, and 15% for the HIV regions of Southwest, Kansas City, St. Louis, Northwest, Southeast, and Missouri correctional facilities, respectively. The variation in the proportion of newly diagnosed individuals that progressed to AIDS by the end of 2009 among the geographic areas may be related to differences in when individuals were tested in the course of their disease progression, or differences in active surveillance techniques.

The rates of new and living HIV and AIDS cases were greatest in St. Louis City (Table 7). The rate of new HIV case diagnoses was 9.7 times higher in St. Louis City compared to Outstate, and 7.1 times higher in Kansas City than Outstate. The rate of new AIDS case diagnoses was 8.2 times higher in St. Louis City compared to Outstate, and 5.3 times higher in Kansas City than Outstate. This demonstrates the disproportionate impact of HIV disease on the major metropolitan areas in Missouri.

Table 8. Diagnosed HIV cases and rates, by selected race/ethnicity, by geographic area, Missouri, 2009

Area	White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Total		
	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*	Cases**	%	Rate*
St. Louis City†	28	31.5%	17.6	54	60.7%	31.4	4	4.5%	38.9	89	100.0%	25.1
St. Louis County†	14	20.6%	2.0	53	77.9%	24.7	0	0.0%	0.0	68	100.0%	6.9
Kansas City†	29	32.6%	10.5	51	57.3%	37.9	5	5.6%	11.0	89	100.0%	18.5
Outstate Missouri†	75	70.1%	2.0	24	22.4%	16.1	5	4.7%	4.5	107	100.0%	2.6
Missouri Correctional Facilities††	7	31.8%	N/A	14	63.6%	N/A	1	4.5%	N/A	22	100.0%	N/A
MISSOURI TOTAL	153	40.8%	3.2	196	52.3%	29.2	15	4.0%	7.9	375	100.0%	6.3

*Per 100,000 population based on 2008 MDHSS estimates.

**Includes cases in persons whose race/ethnicity is either unknown or not listed.

†Does not include persons diagnosed in Missouri correctional facilities.

††Includes persons diagnosed in Missouri correctional facilities.

Note: Row percentages are shown. Percentages may not total due to rounding.

Table 9. Diagnosed HIV cases and rates, by selected race/ethnicity, by HIV region, Missouri, 2009

Area	White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Total		
	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*	Cases**	%	Rate*
St. Louis HIV Region†	58	32.2%	3.7	112	62.2%	27.5	5	2.8%	10.6	180	100.0%	8.6
Kansas City HIV Region†	43	37.7%	4.5	61	53.5%	35.9	6	5.3%	8.1	114	100.0%	9.2
Northwest HIV Region†	8	88.9%	3.5	0	0.0%	0.0	1	11.1%	18.6	9	100.0%	3.7
North Central HIV Region†	9	69.2%	1.4	4	30.8%	10.4	0	0.0%	0.0	13	100.0%	1.8
Southwest HIV Region†	21	80.8%	2.1	1	3.8%	5.0	2	7.7%	5.3	26	100.0%	2.3
Southeast HIV Region†	7	63.6%	1.6	4	36.4%	14.2	0	0.0%	0.0	11	100.0%	2.3
Missouri Correctional Facilities††	7	31.8%	N/A	14	63.6%	N/A	1	4.5%	N/A	22	100.0%	N/A
MISSOURI TOTAL	153	40.8%	3.2	196	52.3%	29.2	15	4.0%	7.9	375	100.0%	6.3

*Per 100,000 population based on 2008 MDHSS estimates.

**Includes cases in persons whose race/ethnicity is either unknown or not listed.

†Does not include persons diagnosed in Missouri correctional facilities.

††Includes persons diagnosed in Missouri correctional facilities.

Note: Row percentages are shown. Percentages may not total due to rounding.

The proportion of new HIV cases diagnosed in 2009 by race/ethnicity varied by geographic area (Table 8). Whites comprised 70% of new HIV case diagnoses in 2009 in Outstate, but only 21% of new HIV cases in St. Louis County. Differences in the general population distribution of each of these geographic areas likely explain the variation observed. The difference in the rate of new HIV case diagnoses by race/ethnicity also varied by geographic area. In Outstate, the rate of new HIV cases was 8.1 times greater in blacks than whites, and 2.3 times greater in Hispanics than whites. In comparison, the rate is only 1.8 times greater in blacks than whites, and 2.2 times greater in Hispanics than whites in St. Louis City.

Similar patterns observed for the geographic areas were also present by HIV region (Table 9). In the Northwest HIV region, whites represented 89% of new HIV case diagnoses. Whereas whites represented only 32% of new HIV cases in the St. Louis HIV region and Missouri correctional facilities. The rate of new HIV case diagnoses was only 2.4 times higher for blacks than whites in the Southwest HIV region. In all other regions, with new diagnoses reported among both race/ethnicity groups, the rate of new HIV cases diagnoses was between seven and nine times greater among blacks than whites.

Table 10. Newly diagnosed and living HIV and AIDS cases in men who have sex with men, by selected race/ethnicity, Missouri, 2009

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	95	44.4%	1648	57.2%	35	47.3%	2164	59.3%
Black	100	46.7%	1079	37.5%	34	45.9%	1326	36.4%
Hispanic	11	5.1%	116	4.0%	3	4.1%	116	3.2%
Other/Unknown	8	3.7%	38	1.3%	2	2.7%	41	1.1%
MISSOURI TOTAL***	214	100.0%	2,881	100.0%	74	100.0%	3,647	100.0%
*Remained HIV cases at the end of the year. **Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009. ***Totals include persons diagnosed in Missouri correctional facilities. Note: Percentages may not total due to rounding.								

Table 11. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by current age group, Missouri, 2009

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	1	0.0%	15	0.6%	0	0.0%	16	0.2%
19-24	59	1.5%	204	8.5%	8	3.4%	278	4.3%
25-44	1430	37.5%	1188	49.4%	131	56.5%	2787	42.7%
45-64	2148	56.3%	948	39.4%	87	37.5%	3214	49.2%
65+	174	4.6%	50	2.1%	6	2.6%	233	3.6%
MISSOURI TOTAL	3,812	100.0%	2,405	100.0%	232	100.0%	6,528	100.0%
*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Totals include persons diagnosed in Missouri correctional facilities. **Percentage of cases per age group. Note: Percentages may not total due to rounding.								

The data presented for each exposure category for Tables 10-23 have not been adjusted to redistribute individuals with missing exposure category information. Therefore these data only represent those individuals with an exposure category reported to MDHSS. The total number of individuals in each exposure category is likely underestimated, especially among those newly diagnosed in 2009. These data are subject to change.

There were a total of 288 new HIV disease diagnoses attributed to men who have sex with men (MSM) in 2009 (Table 10). Blacks and whites represented a nearly equal proportion of both new HIV and new AIDS cases among MSM. In contrast, whites represented a larger proportion of MSM living with both HIV and AIDS compared to blacks. Of the newly diagnosed cases among MSM, 26% progressed to AIDS by the end of 2009. There were not significant differences in the proportion of newly diagnosed cases that progressed to AIDS by race/ethnicity. Both blacks and Hispanics represented a greater proportion of new HIV and AIDS cases compared to the proportion they represented among living cases.

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM (Table 11). Among white MSM living with HIV disease, the majority (56%) were between 45-64 years of age at the end of 2009. In contrast, only 39% and 38% of living black and Hispanic MSM with HIV disease were between 45-64 years of age. The greatest numbers of black and Hispanic MSM living with HIV disease were between 25-44 years of age at the end of 2009. Black MSM represented the largest number of individuals living with HIV who were less than 25 years of age at the end of 2009 (219).

Table 12. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by geographic area, by HIV region, Missouri, 2009

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	1,035	50.5%	949	46.3%	36	1.8%	2,048	31.4%
St. Louis County	529	50.4%	473	45.1%	38	3.6%	1,049	16.1%
Kansas City	922	57.2%	571	35.4%	96	6.0%	1,611	24.7%
Outstate	1,231	82.7%	184	12.4%	55	3.7%	1,489	22.8%
Missouri Correctional Facilities	95	28.7%	228	68.9%	7	2.1%	331	5.1%
MISSOURI TOTAL	3,812	58.4%	2,405	36.8%	232	3.6%	6,528	100.0%
HIV Region								
St. Louis Region	1,737	52.6%	1,447	43.8%	77	2.3%	3,301	50.6%
Kansas City Region	1,253	61.4%	641	31.4%	118	5.8%	2,040	31.3%
Northwest Region	53	91.4%	4	6.9%	1	1.7%	58	0.9%
North Central Region	186	76.5%	44	18.1%	11	4.5%	243	3.7%
Southwest Region	377	89.1%	24	5.7%	15	3.5%	423	6.5%
Southeast Region	111	84.1%	17	12.9%	3	2.3%	132	2.0%
Missouri Correctional Facilities	95	28.7%	228	68.9%	7	2.1%	331	5.1%
MISSOURI TOTAL	3,812	58.4%	2,405	36.8%	232	3.6%	6,528	100.0%
*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Missouri totals include persons diagnosed in Missouri correctional facilities. **Percentage of race/ethnicity in each area/region. ***Percentage of cases per area/region. Note: Percentages may not total due to rounding.								

Of the 6,528 MSM living with HIV disease at the end of 2009, the largest proportion were diagnosed in St. Louis City (31%), followed by Kansas City (25%) (Table 12). There were differences in the proportion of living HIV disease cases among MSM diagnosed in each geographic area by race/ethnicity. In Outstate Missouri, 83% of persons living with HIV disease attributed to MSM were white. Whereas only 29% of MSM living with HIV disease who were diagnosed in Missouri correctional facilities were white. The differences were likely due to variations in the general population of the geographic areas.

Similar patterns were also seen for the HIV regions. The St. Louis HIV region represented 51% of all living cases among MSM and the Kansas City HIV region comprised 31%. The proportion of white living cases among MSM was highest in the Northwest HIV region and lowest in Missouri correctional facilities.

Table 13. Newly diagnosed and living HIV and AIDS cases in men who have sex with men and inject drugs, by selected race/ethnicity, Missouri, 2009

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	8	80.0%	143	65.6%	1	50.0%	258	61.4%
Black	0	0.0%	64	29.4%	1	50.0%	147	35.0%
Hispanic	1	10.0%	7	3.2%	0	0.0%	12	2.9%
Other/Unknown	1	10.0%	4	1.8%	0	0.0%	3	0.7%
MISSOURI TOTAL ***	10	100.0%	218	100.0%	2	100.0%	420	100.0%
*Remained HIV cases at the end of the year. **Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009. ***Totals include persons diagnosed in Missouri correctional facilities. Note: Percentages may not total due to rounding.								

Table 14. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity, by current age group, Missouri, 2009

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	6	1.5%	1	0.5%	1	5.3%	8	1.3%
25-44	143	35.7%	71	33.6%	10	52.6%	226	35.4%
45-64	244	60.8%	135	64.0%	8	42.1%	392	61.4%
65+	8	2.0%	4	1.9%	0	0.0%	12	1.9%
MISSOURI TOTAL	401	100.0%	211	100.0%	19	100.0%	638	100.0%
*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Totals include persons diagnosed in Missouri correctional facilities. **Percentage of cases per age group. Note: Percentages may not total due to rounding.								

There were a total of 12 new HIV disease diagnoses attributed to men who have sex with men and inject drugs (MSM/IDU) in 2009 (Table 13). Whites represented the majority (80%) of new HIV cases among MSM/IDU. Of the newly diagnosed cases, 17% progressed to AIDS by the end of 2009. Whites represented the majority of living HIV and AIDS cases, 66% and 61%, respectively among MSM/IDU.

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM/IDU (Table 14). Among white and black MSM/IDU living with HIV disease, the majority, 61% and 64%, were between 45-64 years of age at the end of 2009. In contrast, only 42% of living Hispanic MSM/IDU with HIV disease were between 45-64 years of age. The majority of Hispanic MSM/IDU living with HIV disease were between 25-44 years of age at the end of 2009.

Table 15. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity, by geographic area, by HIV region, Missouri, 2009

Geographic Area	<u>White</u>		<u>Black</u>		<u>Hispanic</u>		<u>Total*</u>	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	53	41.7%	71	55.9%	2	1.6%	127	19.9%
St. Louis County	27	57.4%	20	42.6%	0	0.0%	47	7.4%
Kansas City	102	64.2%	41	25.8%	12	7.5%	159	24.9%
Outstate	176	86.3%	22	10.8%	5	2.5%	204	32.0%
Missouri Correctional Facilities	43	42.6%	57	56.4%	0	0.0%	101	15.8%
MISSOURI TOTAL	401	62.9%	211	33.1%	19	3.0%	638	100.0%
HIV Region								
St. Louis Region	91	48.4%	93	49.5%	3	1.6%	188	29.5%
Kansas City Region	144	68.6%	50	23.8%	12	5.7%	210	32.9%
Northwest Region	12	85.7%	1	7.1%	0	0.0%	14	2.2%
North Central Region	23	85.2%	2	7.4%	2	7.4%	27	4.2%
Southwest Region	67	90.5%	5	6.8%	2	2.7%	74	11.6%
Southeast Region	21	87.5%	3	12.5%	0	0.0%	24	3.8%
Missouri Correctional Facilities	43	42.6%	57	56.4%	0	0.0%	101	15.8%
MISSOURI TOTAL	401	62.9%	211	33.1%	19	3.0%	638	100.0%
*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Missouri totals include persons diagnosed in Missouri correctional facilities.								
**Percentage of race/ethnicity in each area/region.								
***Percentage of cases per area/region.								
Note: Percentages may not total due to rounding.								

Of the 638 MSM/IDU living with HIV disease at the end of 2009, the largest proportion was diagnosed in Outstate Missouri (32%), followed by Kansas City (25%) (Table 15). There were differences in the proportion of living HIV disease cases among MSM/IDU diagnosed in each geographic area by race/ethnicity. In Outstate Missouri, 86% of living cases attributed to MSM/IDU were white. Whereas only 42% of living cases diagnosed in St. Louis City among MSM/IDU were white. The differences were likely due to variations in the general population of the geographic areas.

The Kansas City HIV region represented 33% of all living cases among MSM/IDU, and the St. Louis HIV region comprised 30%. The proportion of white living cases among MSM/IDU was highest in the Southwest HIV region (91%) and lowest in Missouri correctional facilities (43%).

Table 16. Newly diagnosed and living HIV and AIDS cases in injecting drug users, by selected race/ethnicity and sex, Missouri, 2009

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	3	50.0%	93	33.6%	0	0.0%	125	28.6%
Black Male	2	33.3%	85	30.7%	1	33.3%	151	34.6%
Hispanic Male	0	0.0%	5	1.8%	0	0.0%	12	2.7%
White Female	0	0.0%	55	19.9%	0	0.0%	59	13.5%
Black Female	0	0.0%	33	11.9%	1	33.3%	79	18.1%
Hispanic Female	1	16.7%	2	0.7%	1	33.3%	7	1.6%
MISSOURI TOTAL***	6	100.0%	277	100.0%	3	100.0%	437	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

***Totals include cases in persons whose race/ethnicity is either unknown or not listed. Totals include persons diagnosed in Missouri correctional facilities.

Note: Percentages may not total due to rounding.

Table 17. Living HIV disease cases in injecting drug users, by selected race/ethnicity and sex, by current age group, Missouri, 2009

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	1	0.5%	0	0.0%	0	0.0%	0	0.0%	1	0.1%
19-24	2	0.9%	1	0.4%	5	4.4%	0	0.0%	9	1.3%
25-44	76	34.9%	61	25.8%	50	43.9%	41	36.6%	240	33.6%
45-64	129	59.2%	164	69.5%	59	51.8%	66	58.9%	436	61.1%
65+	10	4.6%	10	4.2%	0	0.0%	5	4.5%	28	3.9%
MISSOURI TOTAL	218	100.0%	236	100.0%	114	100.0%	112	100.0%	714	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Totals include persons diagnosed in Missouri correctional facilities.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

There were a total of 9 new HIV disease diagnoses attributed to persons who inject drugs (IDU) in 2009 (Table 16). The small number of new cases diagnosed among IDU make patterns by race/ethnicity and sex difficult to interpret. Although based on a small number of cases, 33% of newly diagnosed cases progressed to AIDS by the end of 2009. Males represented approximately 67% of all living HIV disease cases among IDU. There were not significant differences in the proportion of living cases among IDU attributed to males between individuals classified as HIV cases versus AIDS cases. There were differences in the distribution of living cases by race/ethnicity and sex among IDU between those classified as HIV cases compared to those classified as AIDS cases. Among living IDU HIV cases, white males represented the largest proportion of cases (34%). In comparison, black males represented the largest proportion (35%) of living AIDS cases among IDU.

The greatest numbers of persons living with HIV disease in each race/ethnicity and sex category presented among IDU were 45 to 64 years of age at the end of 2009 (Table 17). The proportion of living HIV disease cases between the ages of 25 and 44 was greatest among white females.

Table 18. Living HIV disease cases in injecting drug users, by selected race/ethnicity, by geographic area, by HIV region, Missouri, 2009

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	28	17.0%	134	81.2%	2	1.2%	165	23.1%
St. Louis County	22	40.7%	30	55.6%	1	1.9%	54	7.6%
Kansas City	42	31.6%	75	56.4%	14	10.5%	133	18.6%
Outstate	190	79.8%	42	17.6%	5	2.1%	238	33.3%
Missouri Correctional Facilities	50	40.3%	67	54.0%	4	3.2%	124	17.4%
MISSOURI TOTAL	332	46.5%	348	48.7%	26	3.6%	714	100.0%
HIV Region								
St. Louis Region	81	32.3%	165	65.7%	3	1.2%	251	35.2%
Kansas City Region	80	43.0%	88	47.3%	16	8.6%	186	26.1%
Northwest Region	5	71.4%	2	28.6%	0	0.0%	7	1.0%
North Central Region	24	68.6%	11	31.4%	0	0.0%	35	4.9%
Southwest Region	69	85.2%	8	9.9%	3	3.7%	81	11.3%
Southeast Region	23	76.7%	7	23.3%	0	0.0%	30	4.2%
Missouri Correctional Facilities	50	40.3%	67	54.0%	4	3.2%	124	17.4%
MISSOURI TOTAL	332	46.5%	348	48.7%	26	3.6%	714	100.0%
*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Missouri totals include persons diagnosed in Missouri correctional facilities. **Percentage of race/ethnicity in each area/region. ***Percentage of cases per area/region. Note: Percentages may not total due to rounding.								

Of the 714 IDU living with HIV disease at the end of 2009, the largest proportion was diagnosed in Outstate Missouri (33%), followed by St. Louis City (23%) (Table 18). There were differences in the proportion of living HIV disease cases among IDU diagnosed in each geographic area by race/ethnicity. In Outstate Missouri, 80% of living cases attributed to IDU were white. Whereas only 17% of living cases diagnosed in St. Louis City among IDU were white. The differences are likely due to variations in the general population of the geographic areas. Blacks represented a larger proportion of living HIV disease cases among IDU (49%) compared to MSM (37%) and MSM/IDU (33%).

The St. Louis HIV region represented 35% of all living cases among IDU, and the Kansas City HIV region comprised 26%. The proportion of white living cases among IDU was highest in the Southwest HIV region (85%) and lowest in the St. Louis HIV region (32%).

Table 19. Newly diagnosed and living HIV and AIDS cases in heterosexual contacts, by selected race/ethnicity and sex, Missouri, 2009

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	1	7.1%	57	8.0%	2	25.0%	61	7.4%
Black Male	0	0.0%	116	16.3%	1	12.5%	160	19.5%
Hispanic Male	0	0.0%	1	0.1%	0	0.0%	8	1.0%
White Female	2	14.3%	194	27.2%	1	12.5%	190	23.2%
Black Female	10	71.4%	318	44.7%	3	37.5%	376	45.9%
Hispanic Female	1	7.1%	16	2.2%	1	12.5%	14	1.7%
MISSOURI TOTAL ***	14	100.0%	712	100.0%	8	100.0%	820	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

***Total includes cases in persons whose race/ethnicity is either unknown or not listed. Totals include persons diagnosed in Missouri correctional facilities.

Note: Percentages may not total due to rounding.

Table 20. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and sex, by current age group, Missouri, 2009

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	3	0.4%	3	0.2%
19-24	0	0.0%	4	1.4%	4	1.0%	14	2.0%	23	1.5%
25-44	34	28.8%	140	50.7%	203	52.9%	439	63.3%	856	55.9%
45-64	67	56.8%	116	42.0%	157	40.9%	222	32.0%	579	37.8%
65+	17	14.4%	16	5.8%	20	5.2%	16	2.3%	71	4.6%
MISSOURI TOTAL	118	100.0%	276	100.0%	384	100.0%	694	100.0%	1,532	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Totals include persons diagnosed in Missouri correctional facilities.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

There were a total of 22 new HIV disease diagnoses attributed to heterosexual contact in 2009 (Table 19). Black females represented the largest number of new HIV disease diagnoses among heterosexuals. The small number of newly diagnosed cases make patterns by race/ethnicity and sex difficult to interpret. Although based on a small number of cases, 36% of newly diagnosed cases progressed to AIDS by the end of 2009. Females represented 75% of living HIV cases and 72% of living AIDS cases among heterosexual contact cases. The distribution by race/ethnicity and sex among living heterosexual contact cases was similar between those classified as HIV cases and AIDS cases.

For all race/ethnicity and sex categories among heterosexual contact cases, except white males, the greatest proportion of living cases was between 25-44 years of age (Table 20). This was different than the distributions observed among the other exposure categories, where the majority of individuals were currently between 45-64 years of age. The difference was likely related to the fact that heterosexual contact cases were diagnosed more recently, on average, compared to persons in other exposure categories, and that persons who attributed their infection to heterosexual contact were generally younger at the time of diagnosis than persons in other exposure categories.

Table 21. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity, by geographic area, by HIV region, Missouri, 2009								
Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	74	14.6%	420	82.8%	9	1.8%	507	33.1%
St. Louis County	68	24.5%	200	71.9%	5	1.8%	278	18.1%
Kansas City	57	27.1%	138	65.7%	11	5.2%	210	13.7%
Outstate	281	66.1%	123	28.9%	13	3.1%	425	27.7%
Missouri Correctional Facilities	22	19.6%	89	79.5%	1	0.9%	112	7.3%
MISSOURI TOTAL	502	32.8%	970	63.3%	39	2.5%	1,532	100.0%
HIV Region								
St. Louis Region	185	22.0%	629	74.9%	16	1.9%	840	54.8%
Kansas City Region	100	36.1%	158	57.0%	14	5.1%	277	18.1%
Northwest Region	8	66.7%	4	33.3%	0	0.0%	12	0.8%
North Central Region	57	63.3%	26	28.9%	3	3.3%	90	5.9%
Southwest Region	92	74.2%	26	21.0%	4	3.2%	124	8.1%
Southeast Region	38	49.4%	38	49.4%	1	1.3%	77	5.0%
Missouri Correctional Facilities	22	19.6%	89	79.5%	1	0.9%	112	7.3%
MISSOURI TOTAL	502	32.8%	970	63.3%	39	2.5%	1,532	100.0%
*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Missouri totals include persons diagnosed in Missouri correctional facilities. **Percentage of race in each area/region. ***Percentage of cases per area/region. Note: Percentages may not total due to rounding.								

Of the 1,532 living cases among heterosexual contacts at the end of 2009, the largest proportion was diagnosed in St. Louis City (33%); the next highest was Outstate Missouri (28%) (Table 21). There were differences in the proportion of living HIV disease cases among heterosexuals diagnosed in each geographic area by race/ethnicity. In Outstate, 66% of living cases attributed to heterosexual contact were white. Whereas only 15% of living cases diagnosed in St. Louis City among heterosexual contact cases were white. The differences are likely due to variations in the general population of the geographic areas. Blacks represented a larger proportion of living HIV disease cases among heterosexual contact cases (63%) compared to all other exposure categories, primarily due to the large number of black females reporting heterosexual contact as their primary mode of exposure.

The St. Louis HIV region represented 55% of all living cases among heterosexuals, and the Kansas City HIV region comprised 18%. The proportion of white living cases among heterosexuals was highest in the Southwest HIV region (74%) and lowest in Missouri correctional facilities (20%).

Table 22. Deaths* among HIV cases, by mode of transmission, by selected race and sex, Missouri, 1982—2009

Mode of Transmission	White Males		Black Males		White Females		Black Females		Total**	
	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%
MSM	96	61.1%	50	50.5%	0	0.0%	0	0.0%	148	47.9%
MSM/IDU	27	17.2%	8	8.1%	0	0.0%	0	0.0%	36	11.7%
IDU	13	8.3%	11	11.1%	2	12.5%	13	44.8%	41	13.3%
Heterosexual Contact	1	0.6%	11	11.1%	7	43.8%	9	31.0%	29	9.4%
No Indicated Risk (NIR)	17	10.8%	18	18.2%	7	43.8%	6	20.7%	50	16.2%
MISSOURI TOTAL***	157	100.0%	99	100.0%	16	100.0%	29	100.0%	309	100.0%

*May or may not be due to HIV-related illnesses.

**Totals include cases in persons whose race/ethnicity is either unknown or not listed.

***Total (numbers and percentages) include 5 cases (1.6%) with a mode of transmission not indicated on the table, such as hemophilia/coagulation disorder, blood transfusion or tissue recipient, etc. Totals include persons diagnosed in Missouri correctional facilities.

Note: Percentages may not total due to rounding.

Table 23. Deaths* among AIDS cases, by mode of transmission, by selected race and sex, Missouri, 1982—2009

Mode of Transmission	White Males		Black Males		White Females		Black Females		Total**	
	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%
MSM	2,922	79.0%	1,072	70.8%	0	0.0%	0	0.0%	4,099	69.2%
MSM/IDU	362	9.8%	159	10.5%	0	0.0%	0	0.0%	534	9.0%
IDU	137	3.7%	141	9.3%	66	27.8%	84	26.8%	448	7.6%
Heterosexual Contact	54	1.5%	58	3.8%	123	51.9%	191	61.0%	434	7.3%
No Indicated Risk (NIR)	81	2.2%	62	4.1%	21	8.9%	18	5.8%	195	3.3%
MISSOURI TOTAL***	3,697	100.0%	1,514	100.0%	237	100.0%	313	100.0%	5,925	100.0%

*May or may not be due to AIDS-related illnesses.

**Totals include cases in persons whose race/ethnicity is either unknown or not listed.

***Total (numbers and percentages) include 215 cases (3.6%) with a mode of transmission not indicated on the table, such as hemophilia/coagulation disorder, blood transfusion or tissue recipient, etc. Totals include persons diagnosed in Missouri correctional facilities.

Note: Percentages may not total due to rounding.

The number of deaths that have occurred among persons still classified as HIV cases at the time of death was small (309) in comparison to the number of deaths among persons classified as AIDS (5,925) (Tables 22 and 23). The majority of deaths among HIV cases have occurred among white males (51%) (Table 22). There were differences in the distribution of deaths among HIV cases by mode of transmission among the race/ethnicity and sex categories. Among males, the majority of deaths among HIV cases have been attributed to MSM. Among black female HIV cases, the largest number of deaths occurred among cases attributed to IDU. Among white females the number of deaths that occurred was equal for HIV cases attributed to heterosexual contact and to cases with no indicated risk. There was a large proportion of HIV cases among individuals with no indicated risk, especially among white females. Similar patterns were observed for deaths among male AIDS cases (Table 23). Among both white and black female AIDS cases, cases attributed to heterosexual contact represented the majority of deaths. The proportion of deaths among those with no indicated risk among AIDS cases was smaller than among HIV cases, likely because there was more time to obtain exposure category information.

Table 24. Newly diagnosed and living HIV and AIDS cases with exposure category assignments for Missouri, 2009

Exposure category	HIV cases				AIDS cases			
	2009*		Living		2009**		Living	
Adult/Adolescent								
Men who have sex with men	294	78.6%	3,408	67.9%	119	73.9%	4,008	66.6%
Men who have sex with men and inject drugs	13	3.5%	255	5.1%	3	1.9%	461	7.7%
Injecting drug use	8	2.1%	347	6.9%	9	5.6%	504	8.4%
Heterosexual contact	59	15.8%	986	19.6%	30	18.6%	989	16.4%
Hemophilia/coagulation disorder	0	0.0%	18	0.4%	0	0.0%	46	0.8%
Blood transfusion or tissue recipient	0	0.0%	2	0.0%	0	0.0%	9	0.1%
No indicated risk (NIR)	-----	-----	-----	-----	-----	-----	-----	-----
ADULT/ADOLESCENT SUBTOTAL	374	100.0%	5,018 †	100.0%	161	100.0%	6,018 †	100.0%
Pediatric (<13 years old)								
PEDIATRIC SUBTOTAL	1	100.0%	57	100.0%	0	0.0%	29	100.0%
TOTAL	375		5,075		161		6,047	

*HIV cases reported during 2009 which remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

†Includes 2 cases with a confirmed "other" exposure category among persons living with HIV and 1 case among persons living with AIDS.

Note: Percentages may not total due to rounding.

The data in Table 24 have been adjusted to proportionately re-distribute individuals with no indicated risk factor based on sex and race/ethnicity to known exposure categories. These data do not reflect the true counts of persons reported in each exposure category. Among both new and living HIV and AIDS cases, MSM represented the greatest proportion of cases. The proportion of MSM cases was greater for new HIV and AIDS cases compared to the proportion among their respective living cases. This may indicate changes in how individuals are being infected over time. However, the observed pattern may also be related to the method used to re-distribute those with unknown risks. The method used to re-distribute new cases may weight those with no indicated risk more heavily to the MSM category. There was one new HIV case diagnosed among a child less than 13 years of age in 2009.

The majority of HIV disease cases diagnosed in 2009 (93%) and those living with HIV disease (93%) were residents of a metropolitan area at the time of diagnosis (Table 25). For a list of counties that were classified as a metropolitan area refer to the Appendix. There were differences in the proportion of new and living HIV disease cases by sex based on the population of the area of residence. The proportion of males living with HIV disease decreased as the population of the area of residence decreased. Whereas 84% of living HIV disease cases in metropolitan areas occurred among males, only 72% of living cases in nonmetropolitan areas were among males. There were differences in the distribution of new and living HIV disease cases by race/ethnicity based on the population of the area of residence. For both new and living HIV disease cases, as the population of the area of residence became smaller, the proportion of cases that occurred among whites increased. For example, only 39% of new HIV disease diagnoses were among whites in metropolitan areas. But in nonmetropolitan areas whites comprised 65% of new diagnoses. There were also differences based on the population of area of residence in the distribution of new and living HIV disease cases by exposure category. As the population of the area of residence decreased, the proportion of cases attributed to MSM decreased. Among those living with HIV disease, the proportion of cases diagnosed between 25-44 years of age decreased as the population of the area of residence decreased. The proportion of living cases diagnosed between 45-64 years of age increased as the population of the area of residence decreased.

Table 25. Newly diagnosed and living HIV disease* cases, by population of area of residence at time of diagnosis, by sex, by race/ethnicity, by exposure category and age at diagnosis, Missouri, 2009†

	Newly Diagnosed						Living					
	Metropolitan Area**			Micropolitan Area***			Nonmetropolitan Area****			Metropolitan Area**		
	Cases	%		Cases	%		Cases	%		Cases	%	
Sex												
Male	397	83.4%	8	72.7%	14	60.9%	8,038	83.7%	298	75.8%	261	71.9%
Female	79	16.6%	3	27.3%	9	39.1%	1,563	16.3%	95	24.2%	102	28.1%
Total	476	100.0%	11	100.0%	23	100.0%	9,601	100.0%	393	100.0%	363	100.0%
Race/Ethnicity												
White	185	38.9%	7	63.6%	15	65.2%	4,872	50.7%	289	73.5%	288	79.3%
Black	261	54.8%	3	27.3%	6	26.1%	4,235	44.1%	87	22.1%	59	16.3%
Hispanic	17	3.6%	1	9.1%	2	8.7%	361	3.8%	13	3.3%	13	3.6%
Other/Unknown	13	2.7%	0	0.0%	0	0.0%	133	1.4%	4	1.0%	3	0.8%
Total	476	100.0%	11	100.0%	23	100.0%	9,601	100.0%	393	100.0%	363	100.0%
Exposure Category												
Men who have sex with men	267	56.1%	3	27.3%	5	21.7%	5,876	61.2%	170	43.3%	151	41.6%
Men who have sex with men and inject drugs	7	1.5%	2	18.2%	1	4.3%	481	5.0%	33	8.4%	23	6.3%
Injecting drug use	6	1.3%	0	0.0%	0	0.0%	521	5.4%	34	8.7%	35	9.6%
Heterosexual contact	18	3.8%	1	9.1%	3	13.0%	1,254	13.1%	83	21.1%	83	22.9%
No Indicated Risk (NIR)	177	37.2%	5	45.5%	14	60.9%	1,342	14.0%	61	15.5%	56	15.4%
Other	0	0.0%	0	0.0%	0	0.0%	57	0.6%	5	1.3%	8	2.2%
Pediatric	1	0.2%	0	0.0%	0	0.0%	70	0.7%	7	1.8%	7	1.9%
Total	476	100.0%	11	100.0%	23	100.0%	9,601	100.0%	393	100.0%	363	100.0%
Age at Diagnosis												
<2	0	0.0%	0	0.0%	0	0.0%	44	0.5%	4	1.0%	4	1.1%
2-12	1	0.2%	0	0.0%	0	0.0%	20	0.2%	2	0.5%	3	0.8%
13-18	28	5.9%	0	0.0%	0	0.0%	239	2.5%	9	2.3%	9	2.5%
19-24	109	22.9%	1	9.1%	1	4.3%	1,201	12.5%	41	10.4%	33	9.1%
25-44	244	51.3%	6	54.5%	11	47.8%	6,550	68.2%	250	63.6%	224	61.7%
45-64	88	18.5%	3	27.3%	10	43.5%	1,482	15.4%	86	21.9%	84	23.1%
65+	6	1.3%	1	9.1%	1	4.3%	65	0.7%	1	0.3%	6	1.7%
Total	476	100.0%	11	100.0%	23	100.0%	9,601	100.0%	393	100.0%	363	100.0%

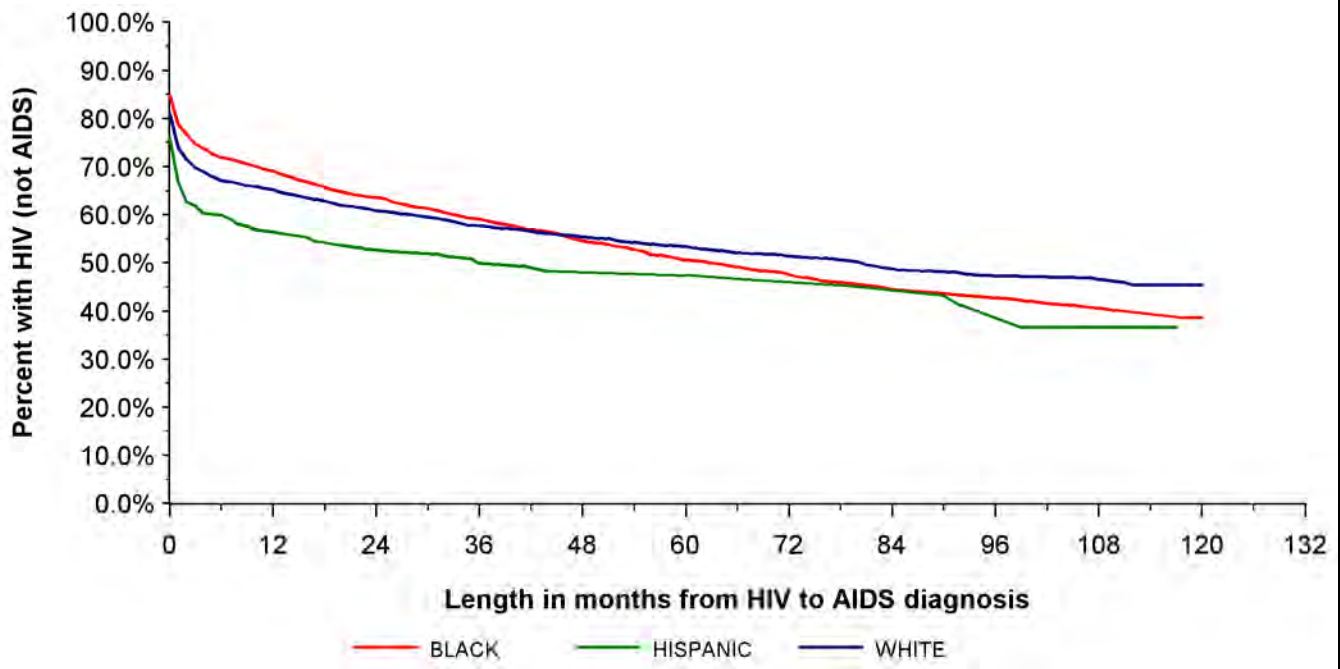
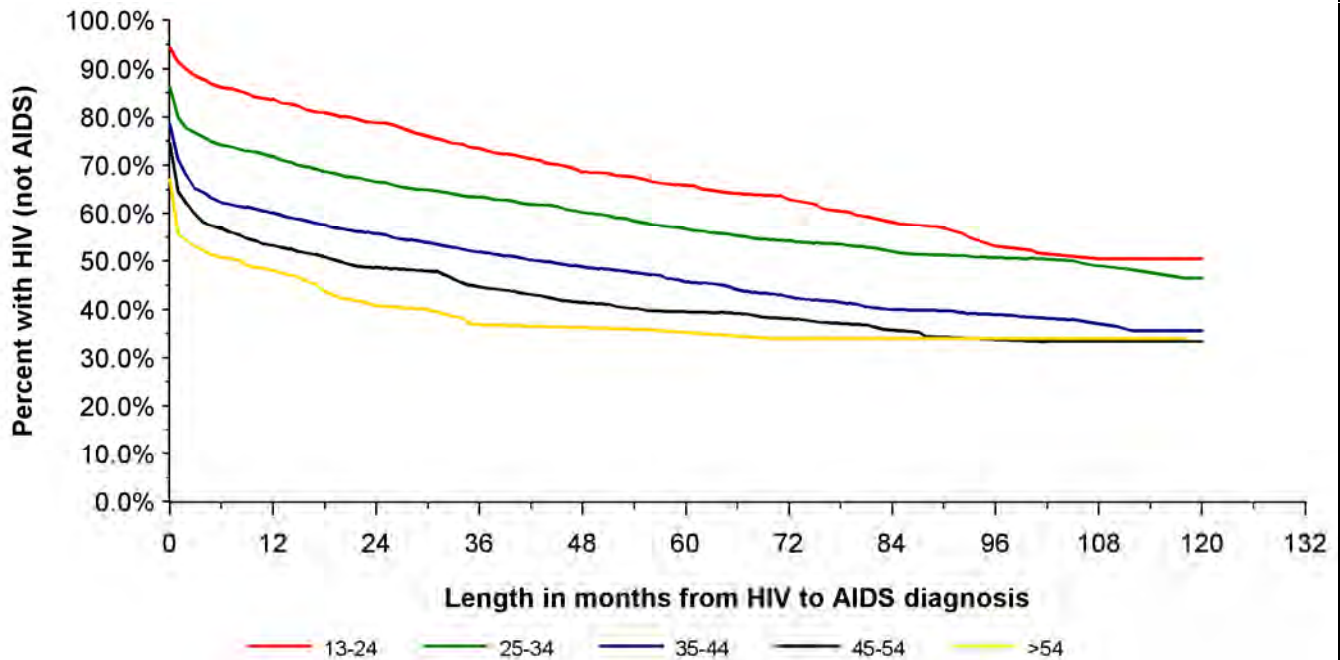
*Includes all individuals diagnosed with the HIV virus, regardless of current status (i.e., HIV or AIDS)

†Does not include persons diagnosed in Missouri correctional facilities.

**A metropolitan area contains a core urban area with a population of at least 50,000. It also includes adjacent counties that have a high degree of social and economic integration with the core urban area. Based on 2008 US Census estimates. See Appendix for map of included counties.

***A micropolitan area contains a core urban area with a population between 10,000-49,999. It also includes adjacent counties that have a high degree of social and economic integration with the core urban area. Based on 2008 US Census estimates. See Appendix for map of included counties.

****An area that does not meet the population requirements for the metropolitan or micropolitan area. Based on 2008 US Census estimates. See Appendix for map of included counties.

Figure 22. Length of time between HIV and AIDS diagnosis, by race/ethnicity, Missouri, 2000-2008**Figure 23. Length of time between HIV and AIDS diagnosis, by age at diagnosis*, Missouri, 2000-2008**

*Age at earliest diagnosis of HIV disease, regardless of disease progression.

A greater proportion of Hispanics progressed from HIV to AIDS within 12 months of their HIV diagnosis compared to whites and blacks (Figure 22). Around 84 months after the initial HIV diagnosis, the proportion of cases that progressed to AIDS was similar by race/ethnicity. It is important to note that for all curves displayed, data in the later months should be interpreted with caution as they are based on small numbers.

There were differences in the progression from HIV to AIDS by the age at HIV diagnosis (Figure 23). Over time, the proportion of cases that progressed to AIDS remained higher as the age at initial HIV diagnosis increased.

Figure 24. Length of time between HIV and AIDS diagnosis, by mode of transmission, Missouri, 2000-2008

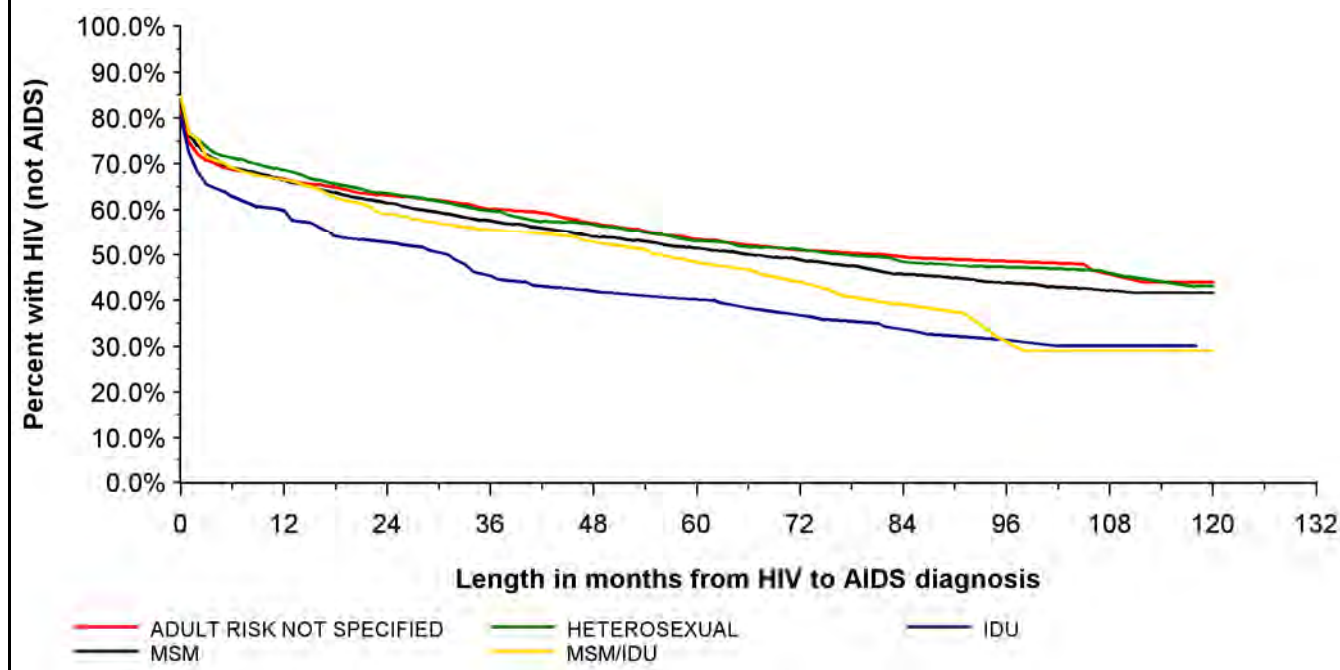
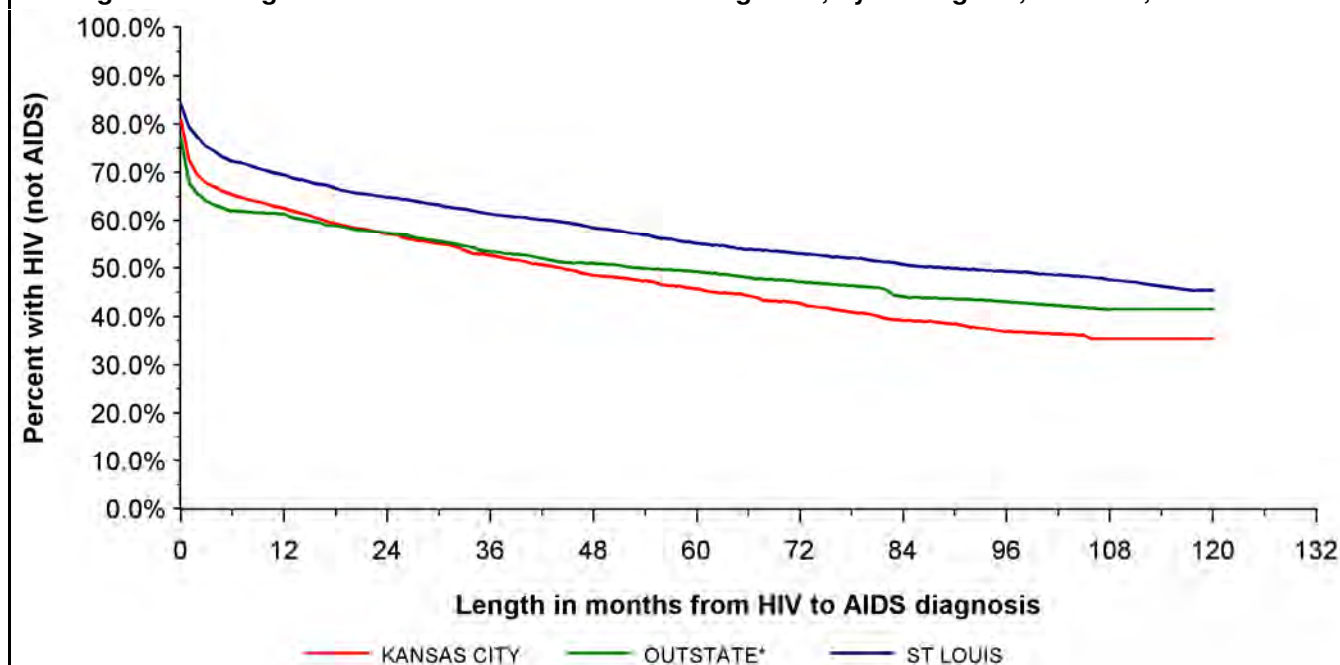


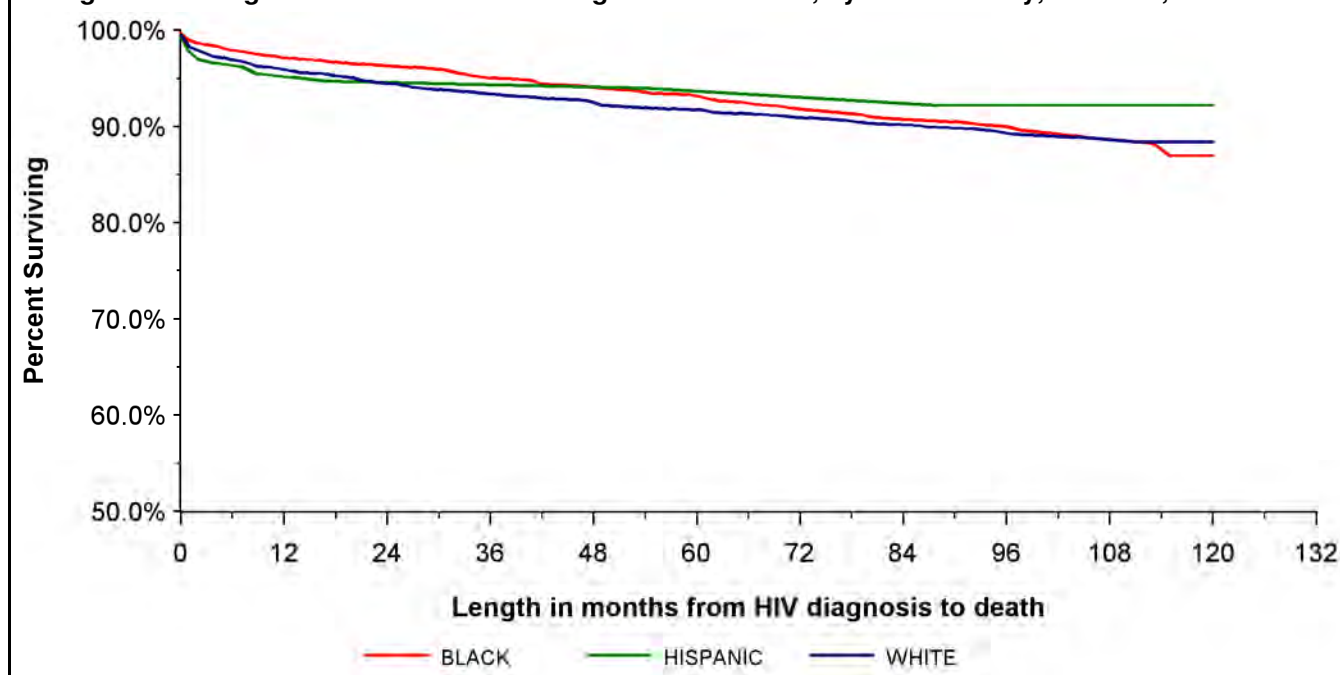
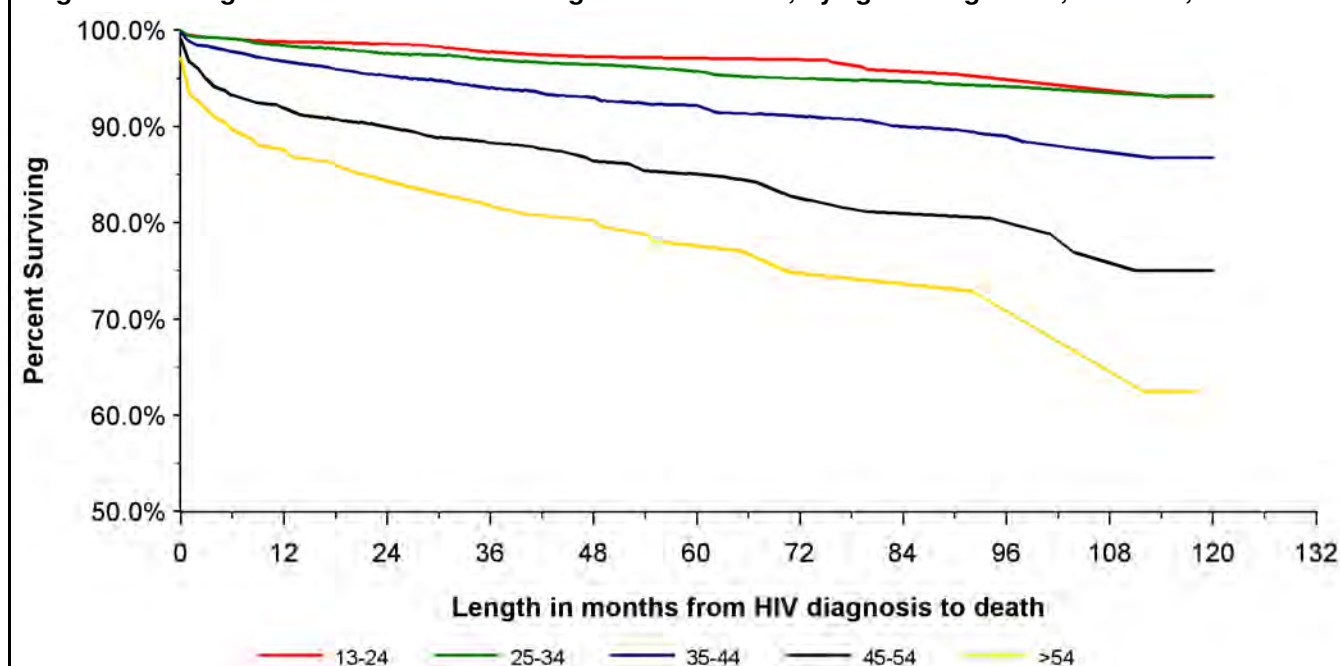
Figure 25. Length of time between HIV and AIDS diagnosis, by HIV region*, Missouri, 2000-2008



*Outstate includes the North Central, Northwest, Southeast, and Southwest HIV regions

A greater proportion of IDU progressed from HIV to AIDS within 12 months of their HIV diagnosis compared to individuals from all other exposure categories (Figure 24). Around 96 months after the initial HIV diagnosis, the proportion of cases that progressed to AIDS was similar for IDU and MSM/IDU.

There were differences in the progression from HIV to AIDS by HIV region (Figure 25). The proportion of individuals that progressed to AIDS over time was greater for the Kansas City HIV region and all Outstate HIV regions combined compared to the St. Louis HIV region. Differences observed among the regions may be attributed in part to differences in the routine monitoring and reporting of CD4 counts and other active surveillance techniques.

Figure 26. Length of time between HIV diagnosis and death, by race/ethnicity, Missouri, 2000-2008**Figure 27. Length of time between HIV diagnosis and death, by age at diagnosis*, Missouri, 2000-2008**

*Age at earliest diagnosis of HIV disease, regardless of disease progression.

The length of time between the initial HIV diagnosis and reported death was similar by race/ethnicity (Figure 26). Five years following the initial HIV diagnosis, greater than 90% of all individuals were still living.

There were differences in the length of time between HIV diagnosis and death by the age at HIV diagnosis (Figure 27). Over time, the proportion of cases that were deceased was higher as the age at initial HIV diagnosis increased. For example, 72 months following the initial diagnosis 97% of individuals diagnosed between 13-24 years of age were still living, compared to only 75% of individuals diagnosed at greater than 54 years of age.

Figure 28. Length of time between HIV diagnosis and death, by mode of transmission, Missouri, 2000-2008

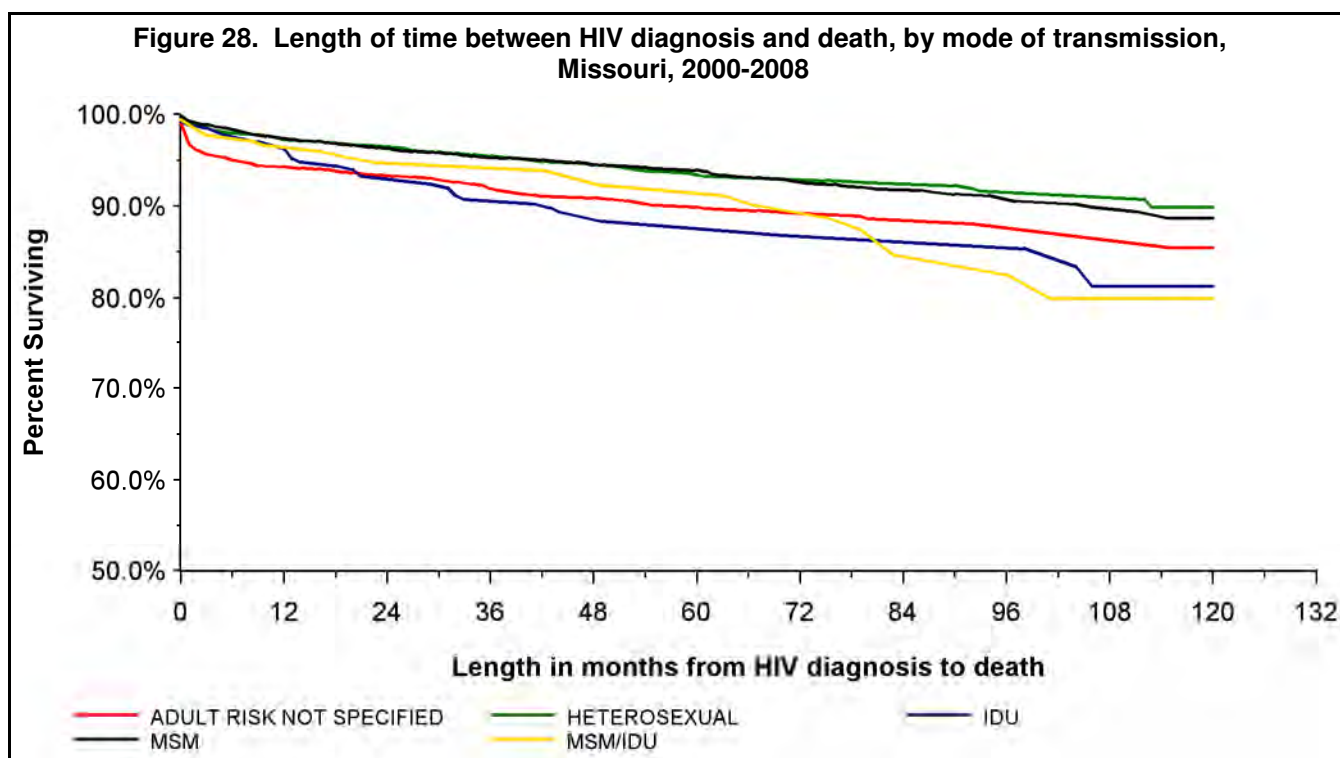
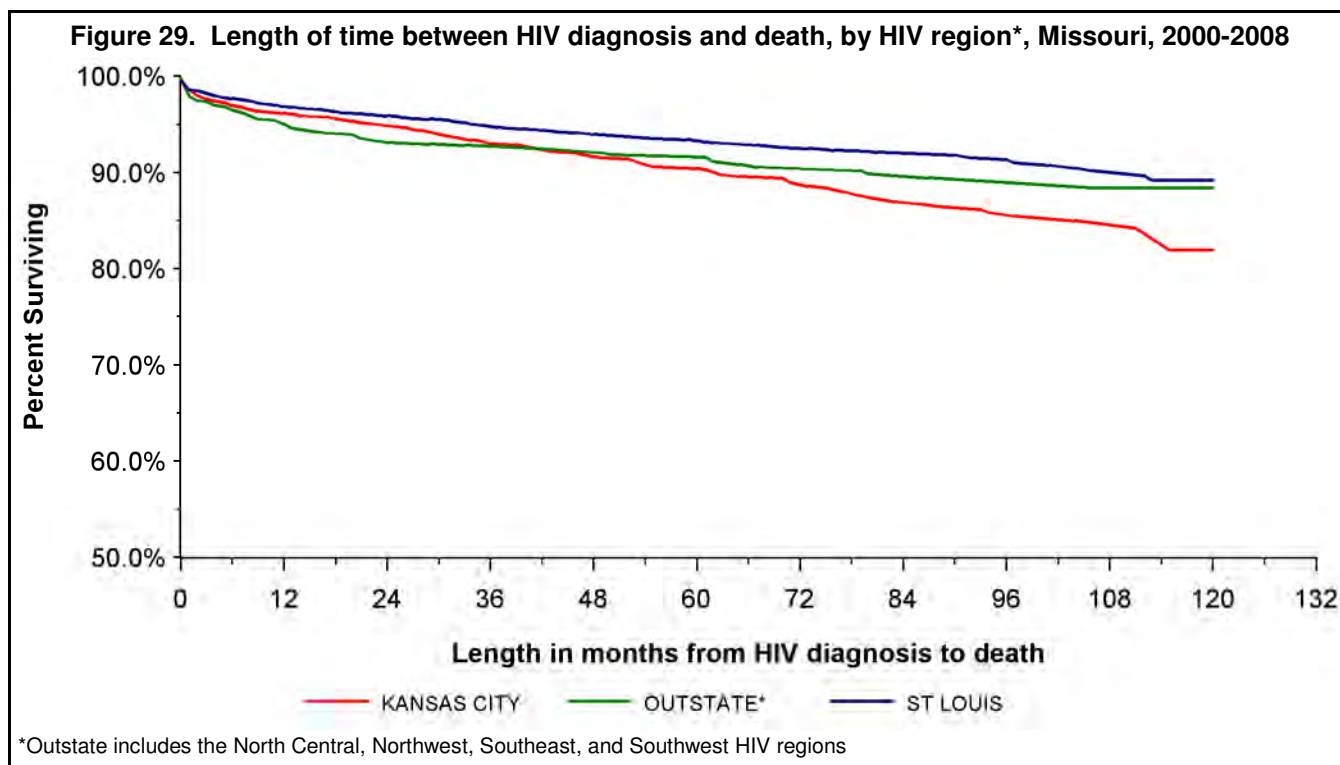


Figure 29. Length of time between HIV diagnosis and death, by HIV region*, Missouri, 2000-2008



A greater proportion of IDU and those with no reported risk were deceased within 24 months of their HIV diagnosis compared to individuals from all other exposure categories (Figure 28). Differences in survival persisted over time.

There were slight differences in survival following HIV diagnosis by HIV region (Figure 29). At 24 months following the initial HIV diagnosis, the proportion still living was 96%, 95%, and 93% for the St. Louis HIV region, Kansas City HIV region, and all other Outstate HIV regions combined. Differences in survival among the regions increased over time.

Table 26. Initial CD4 and viral load values[†] among adults and adolescents newly diagnosed with HIV disease, Missouri, 2007-2008

Viral Load (copies/mL)	CD4 Count (cells/ μ L)											
	No Test		<200		200-350		351-500		>500		Total	
	N	%*	N	%*	N	%*	N	%*	N	%*	N	%**
No Test	263	22.7%	48	4.1%	15	1.3%	11	0.9%	18	1.6%	355	30.6%
0-10,000	90	7.8%	103	8.9%	62	5.3%	47	4.1%	115	9.9%	417	35.9%
10,001-100,000	58	5.0%	58	5.0%	40	3.4%	41	3.5%	48	4.1%	245	21.1%
>100,000	17	1.5%	79	6.8%	21	1.8%	12	1.0%	14	1.2%	143	12.3%
Total	428	36.9%	288	24.8%	138	11.9%	111	9.6%	195	16.8%	1160	100.0%

[†]Within 12 months of the initial HIV diagnosis

* % of table total

**% of column total

Of persons newly diagnosed with HIV disease between 2007 and 2008, 23% did not have a CD4 or a viral load laboratory result reported to MDHSS within 12 months of diagnosis (Table 26). Nearly 25% of persons diagnosed between 2007 and 2008 had an initial CD4 count of less than 200 cells/ μ L. This indicates that a sizable proportion of individuals were being diagnosed at a later stage of disease progression, and likely were unaware of their infection for at least several years. This suggests greater emphasis is needed to establish routine HIV testing, so individuals are diagnosed within a shorter time period after becoming infected.

Table 27. Percent of adults and adolescents receiving at least one CD4 within 12 months of their HIV diagnosis and the median initial CD4 count, Missouri, 2007-2008

	Number	% with CD4 within 12 months of HIV diagnosis	Median of initial CD4 counts (cells/ μ L)
HIV Status			
HIV (not AIDS)	746	48.4%	504
Concurrent HIV and AIDS diagnosis	255	97.3%	61
AIDS >1 month after HIV diagnosis	159	77.4%	175
Sex			
Male	946	62.5%	286
Female	214	65.9%	321
Race/Ethnicity			
White	482	72.4%	323
Black	591	54.8%	264
Hispanic	67	70.1%	210
Other/Unknown	20	60.0%	309
Exposure Category			
MSM	568	64.8%	322
MSM/IDU	43	76.7%	369
IDU	39	74.4%	197
HRH	75	70.7%	336
Other	0	--	--
NIR	435	57.2%	228
Age at HIV Diagnosis			
13-18	51	58.8%	402
19-24	236	52.5%	343
25-44	627	64.6%	276
45-64	231	71.9%	190
65+	15	46.7%	75

The percent of adults and adolescents receiving at least one CD4 within 12 months of their HIV diagnosis and the median initial CD4 count varied by sex, race/ethnicity, exposure category, and age at HIV diagnosis (Table 27). Of adults and adolescents newly diagnosed between 2007 and 2008, a greater proportion of females had a CD4 within 12 months of diagnosis (66%) compared to males (63%). The initial median CD4 count tended to be greater for females (321 cells/ μ L) compared to males (286 cells/ μ L). A greater proportion of whites and Hispanics tended to have a CD4 count within 12 months of diagnosis compared to blacks and persons of another race or an unknown race. Among those with a CD4 count within 12 months of diagnosis, the initial CD4 count tended to be lower among Hispanics (210 cells/ μ L) and blacks (264 cells/ μ L) compared to whites (323 cells/ μ L) and persons of another race or an unknown race (309 cells/ μ L). This suggests that persons of Hispanic origin were not getting diagnosed until later in their disease progression compared to other race/ethnicities. A lower proportion of MSM had an initial CD4 within 12 months of diagnosis compared to persons with other known exposure categories. The initial median CD4 tended to be lower for IDU and persons with no indicated risk compared to all other exposure categories. The median initial CD4 count tended to decrease as the age at HIV diagnosis increased. These data may be beneficial when determining groups that should be targeted for new testing initiatives to identify individuals earlier in their disease progression.

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Key Highlights: What are the indicators of HIV/AIDS infection risk in Missouri?

Primary and Secondary (P&S) Syphilis

- The number of reported P&S syphilis cases decreased from 224 cases in 2008 to 173 cases in 2009. The decrease observed was due to a decline in reported cases in all HIV regions except the North Central and Southwest HIV regions.
- The rate of reported cases was highest in St. Louis City (11 per 100,000).
- Blacks were disproportionately impacted, with a case rate 5.0 times greater than whites.

Early Latent Syphilis

- The number of early latent syphilis cases increased by one case from 2008 (145 cases) to 2009 (146 cases). The increase was primarily driven by an increase in reported cases in the St. Louis HIV region from 2008 (60) to 2009 (77).
- The rate of reported cases in 2009 was highest in St. Louis City (16 per 100,000).
- Males represented the majority (82%) of reported early latent syphilis cases.
- The case rate was 9.7 times higher among blacks than whites.

Gonorrhea

- The number of reported gonorrhea cases decreased from 2008 (8,014) to 2009 (6,488 cases). Similar trends were observed in all regions of the state, except for the Southwest and Northwest HIV regions. In the Southwest HIV region, the number of gonorrhea cases reported from 2008 to 2009 increased by 12% from 454 to 508 cases. The number of gonorrhea cases reported from 2008 to 2009 in the Northwest HIV region increased by 38% from 66 to 91 cases.
- St. Louis City had the highest rate of reported gonorrhea cases at 366 per 100,000 persons.
- A larger proportion of reported gonorrhea cases were diagnosed between 15 and 19 years of age among black females (41%) compared to white females (27%), black males (24%), and white males (12%).

Chlamydia

- The number of reported chlamydia cases increased from 24,817 in 2008 to 25,868 in 2009. Similar trends were observed for all regions of the state.
- St. Louis City had the highest chlamydia rate in 2009 (1,239 per 100,000). Jackson County reported the second highest case rate of chlamydia (822 per 100,000).
- A larger proportion of reported chlamydia cases were diagnosed between 15 and 19 years old among black females (45%), compared to white females (38%), black males (31%), and white males (23%).

Hepatitis B

- The number of reported Hepatitis B cases in Missouri decreased by 88 cases from 2008 (510) to 2009 (422).
- Kansas City had the greatest number of reported Hepatitis B cases with 86 cases.
- Among females, the largest numbers of cases were 20-29 years of age, while among males the largest numbers of cases were 40-49 years old.

Hepatitis C

- The number of reported Hepatitis C cases in Missouri decreased by 82 cases from 2008 (4,923) to 2009 (4,841).
- Kansas City had the greatest number of reported Hepatitis C cases with 624 cases
- Among females, the largest numbers of cases were 40-49 years of age, while among males the largest numbers of cases were 50-59 years old.

HIV and STD Co-infections

- There were 258 persons living with HIV who were reported with an STD in 2009.
- Of the 319 early syphilis cases reported in 2009, 30% were among individuals living with HIV. Only 2% of gonorrhea cases and less than 1% of chlamydia cases reported in 2009 were among individuals living with HIV.
- St. Louis residents represented 68% of all living HIV cases reported with chlamydia in 2009, 63% of those with gonorrhea, 64% of those with multiple STD co-morbidities, and 64% of those with early syphilis.
- Although blacks represented only 44% of living HIV disease cases, they represented 65% of individuals diagnosed with an STD co-morbidity.

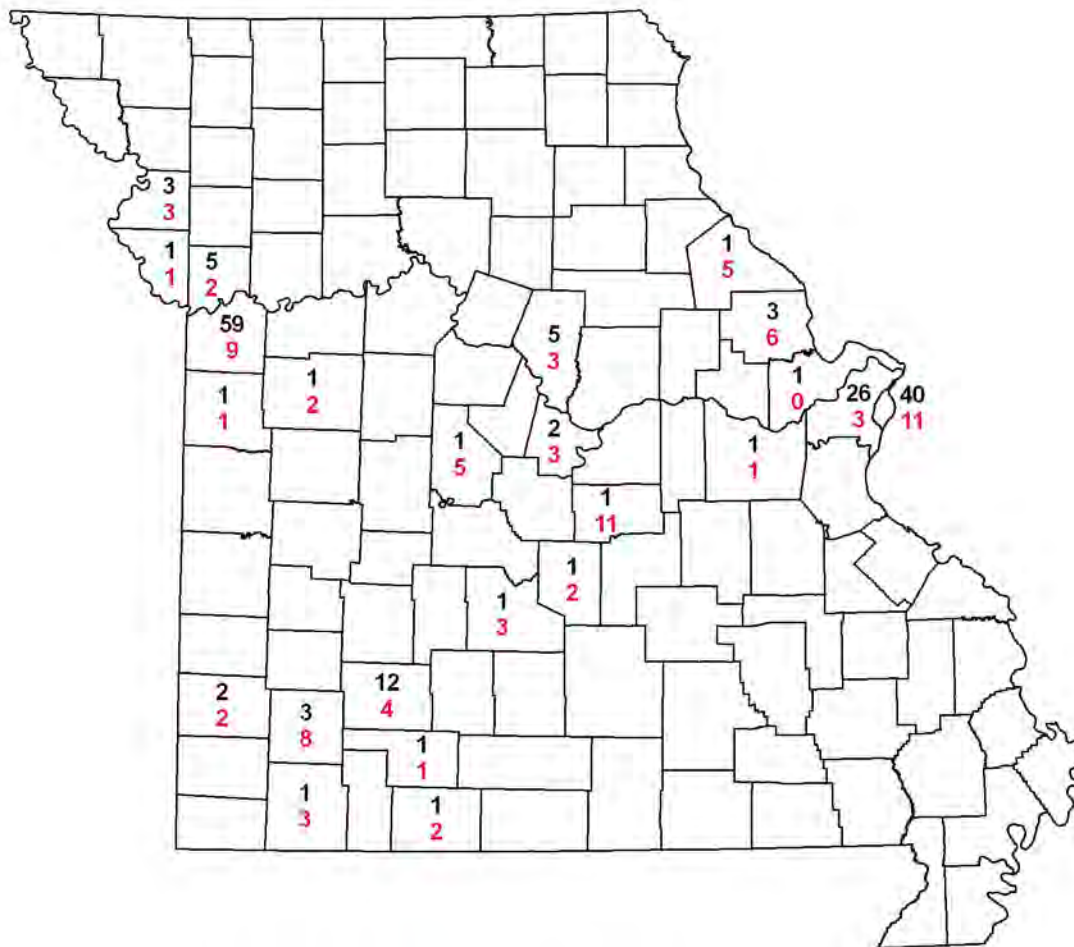
HIV and STD Co-infections

- Of the 11,122 individuals living with HIV disease, 69 were reported with a hepatitis co-morbidity in 2009.
- Six percent of chronic Hepatitis B cases and 1% of chronic Hepatitis C cases reported in 2009 were among persons living with HIV disease.

	Male			Female			Total	
	Cases	%	Rate**	Cases	%	Rate**	Cases	Rate**
Missouri								
White	91	57.6%	3.8	7	46.7%	0.3	98	2.0
Black	59	37.3%	18.8	8	53.3%	2.2	67	10.0
Other/Unknown*	8	5.1%	--	0	0.0%	--	8	--
Total Cases	158	100.0%	5.5	15	100.0%	0.5	173	2.9
St. Louis Region								
White	23	35.4%	3.0	1	16.7%	0.1	24	1.5
Black	40	61.5%	21.6	5	83.3%	2.3	45	11.1
Other/Unknown*	2	3.1%	--	0	0.0%	--	2	--
Total Cases	65	100.0%	6.4	6	100.0%	0.6	71	3.4
Kansas City Region								
White	38	61.3%	8.2	3	60.0%	0.6	41	4.3
Black	18	29.0%	22.9	2	40.0%	2.2	20	11.8
Other/Unknown*	6	9.7%	--	0	0.0%	--	6	--
Total Cases	62	100.0%	10.3	5	100.0%	0.8	67	5.4
Northwest Region								
White	3	100.0%	2.7	0	--	0.0	3	1.3
Black	0	0.0%	0.0	0	--	0.0	0	0.0
Other/Unknown*	0	0.0%	--	0	--	--	0	--
Total Cases	3	100.0%	2.5	0	--	0.0	3	1.2
North Central Region								
White	7	87.5%	2.1	1	50.0%	0.3	8	1.2
Black	1	12.5%	4.8	1	50.0%	5.7	2	5.2
Other/Unknown*	0	0.0%	--	0	0.0%	--	0	--
Total Cases	8	100.0%	2.2	2	100.0%	0.5	10	1.4
Southwest Region								
White	20	100.0%	4.0	2	100.0%	0.4	22	2.2
Black	0	0.0%	0.0	0	0.0%	0.0	0	0.0
Other/Unknown*	0	0.0%	--	0	0.0%	--	0	--
Total Cases	20	100.0%	3.7	2	100.0%	0.4	22	2.0
Southeast Region								
White	0	--	0.0	0	--	0.0	0	0.0
Black	0	--	0.0	0	--	0.0	0	0.0
Other/Unknown*	0	--	--	0	--	--	0	--
Total Cases	0	--	0.0	0	--	0.0	0	0.0
*Includes cases identified with Hispanic ethnicity.								
**Per 100,000 population based on 2008 MDHSS population estimates.								

There were a total of 173 primary and secondary (P&S) syphilis cases reported in 2009 (Table 28). This represented a decrease from the 224 P&S syphilis cases reported in 2008. The majority of cases (91%) were reported among males. The rate of P&S syphilis cases among males was highest in the Kansas City HIV region (10.3), followed by the St. Louis HIV region (6.4). Forty-one percent of all P&S syphilis cases were reported in the St. Louis HIV region and 39% were reported in the Kansas City HIV region. The Southwest HIV region had the third largest number of P&S syphilis cases reported. The rate of reported P&S syphilis cases was higher for blacks compared to whites in all regions that reported P&S syphilis cases among blacks.

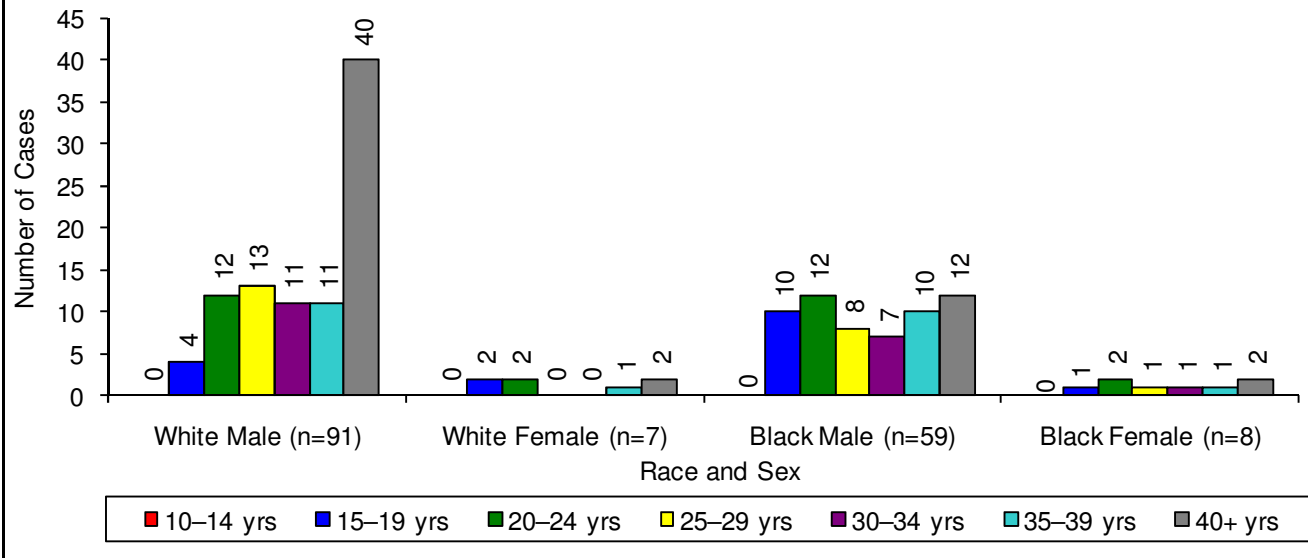
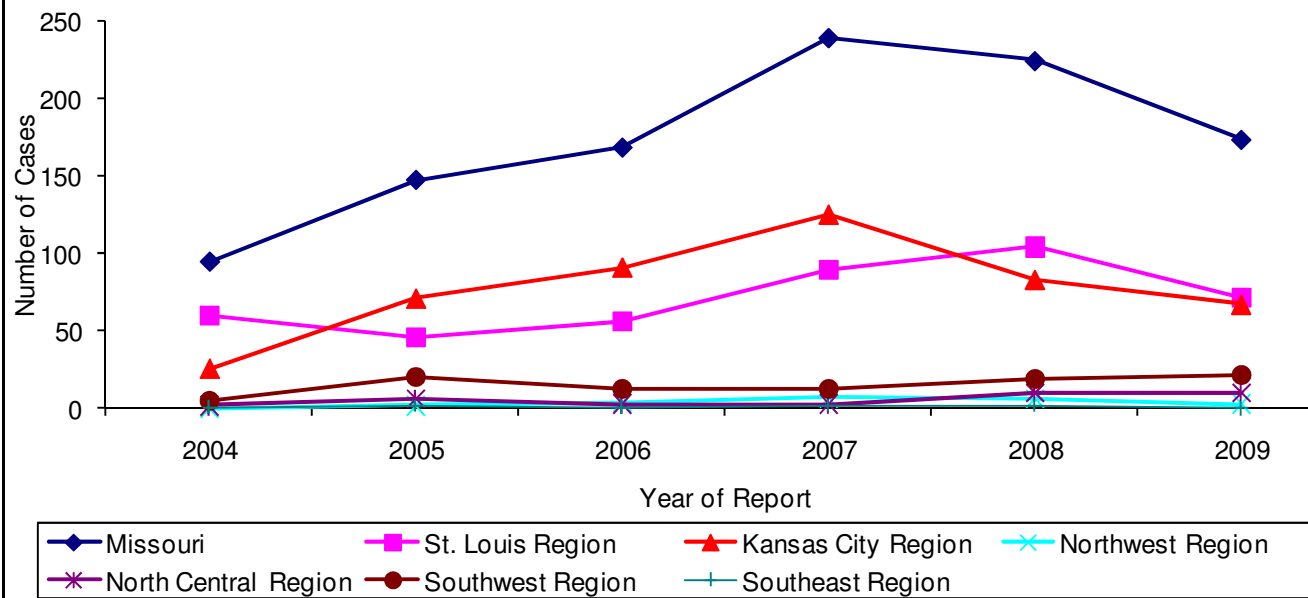
Figure 30. Reported P&S syphilis cases* and rates, by county, Missouri, 2009**



*Case counts are in black.

**Case rates are in red, per 100,000 population based on 2008 MDHSS population estimates.

P&S syphilis cases were concentrated in metropolitan areas (Figure 30). There were 91 counties that did not report any P&S syphilis cases in 2009. St. Louis City had the highest rate of reported P&S syphilis cases at 11 per 100,000 persons. This means that for every 100,000 persons living in St. Louis City, there were 11 reported with P&S syphilis in 2009.

Figure 31. Reported P&S syphilis cases, by race and sex, by age group at diagnosis, Missouri, 2009**Figure 32. Reported P&S syphilis cases by geographic region and year of report, Missouri, 2004-2009**

The largest numbers of P&S syphilis cases were reported among white males (91) and black males (59) (Figure 31). The number of reported cases decreased from 2008 to 2009 among all race/ethnicity and sex categories presented. There were differences in the distribution of reported cases by age at diagnosis among the race/ethnicity and sex categories. Among white males, the largest number of cases was reported among individuals 40 or more years of age at the time of diagnosis. Among black males reported cases were more evenly distributed among all age groups 15 years of age or greater.

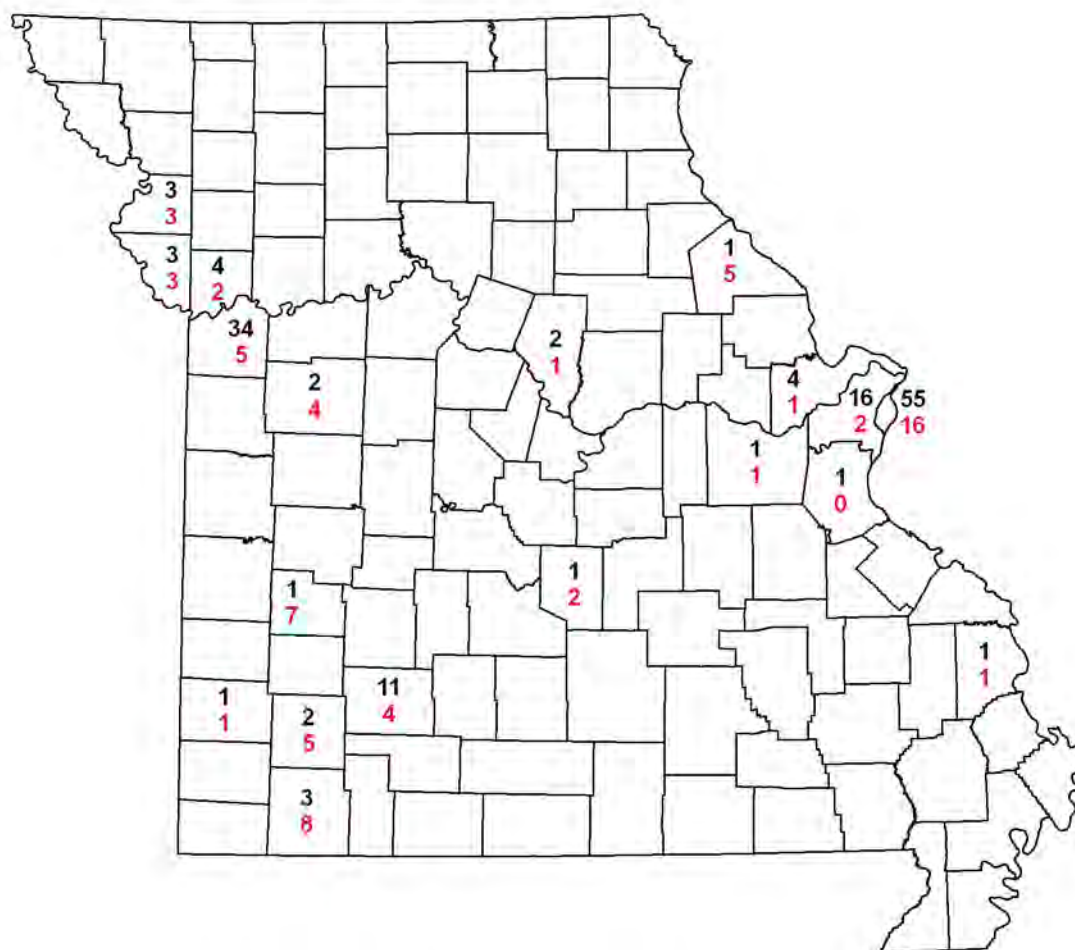
The number of reported P&S syphilis cases in Missouri increased from 2004 to 2007 and then decreased through 2009 (Figure 32). The number of reported P&S syphilis cases was higher in 2009 (22) than 2008 (19) in the Southwest HIV region. The number of reported cases remained the same from 2008 to 2009 (10) in the North Central HIV region. The number of reported P&S syphilis cases decreased from 2008 to 2009 in the remaining HIV regions.

Table 29. Reported early latent syphilis cases and rates, by race*, by geographic region, by sex, Missouri, 2009

	Male			Female			Total	
	Cases	%	Rate**	Cases	%	Rate**	Cases	Rate**
Missouri								
White	45	37.5%	1.9	12	46.2%	0.5	57	1.2
Black	67	55.8%	21.3	11	42.3%	3.1	78	11.6
Other/Unknown*	8	6.7%	--	3	11.5%	--	11	--
Total Cases	120	100.0%	4.2	26	100.0%	0.9	146	2.5
St. Louis Region								
White	20	28.2%	2.6	1	16.7%	0.1	21	1.3
Black	48	67.6%	25.9	5	83.3%	2.3	53	13.0
Other/Unknown*	3	4.2%	--	0	0.0%	--	3	--
Total Cases	71	100.0%	7.0	6	100.0%	0.6	77	3.7
Kansas City Region								
White	8	26.7%	1.7	4	30.8%	0.8	12	1.3
Black	18	60.0%	22.9	6	46.2%	6.6	24	14.1
Other/Unknown*	4	13.3%	--	3	23.1%	--	7	--
Total Cases	30	100.0%	5.0	13	100.0%	2.1	43	3.5
Northwest Region								
White	3	100.0%	2.7	0	--	0.0	3	1.3
Black	0	0.0%	0.0	0	--	0.0	0	0.0
Other/Unknown*	0	0.0%	--	0	--	--	0	--
Total Cases	3	100.0%	2.5	0	--	0.0	3	1.2
North Central Region								
White	3	100.0%	0.9	0	--	0.0	3	0.5
Black	0	0.0%	0.0	0	--	0.0	0	0.0
Other/Unknown*	0	0.0%	--	0	--	--	0	--
Total Cases	3	100.0%	0.8	0	--	0.0	3	0.4
Southwest Region								
White	11	84.6%	2.2	6	100.0%	1.2	17	1.7
Black	1	7.7%	9.0	0	0.0%	0.0	1	5.0
Other/Unknown*	1	7.7%	--	0	0.0%	--	1	--
Total Cases	13	100.0%	2.4	6	100.0%	1.1	19	1.7
Southeast Region								
White	0	--	0.0	1	100.0%	0.4	1	0.2
Black	0	--	0.0	0	0.0%	0.0	0	0.0
Other/Unknown*	0	--	--	0	0.0%	--	0	--
Total Cases	0	--	0.0	1	100.0%	0.4	1	0.2
*Includes cases identified with Hispanic ethnicity.								
**Per 100,000 population based on 2008 MDHSS population estimates.								

There were a total of 146 early latent syphilis cases reported in 2009, compared to 145 cases reported in 2008 (Table 29). The majority of cases (82%) were reported among males. Males represented a smaller proportion of the reported cases in the Kansas City HIV region (70%) than in the St. Louis HIV region (92%). The rate of early latent syphilis cases among all cases was highest in the St. Louis HIV region (3.7), followed by the Kansas City HIV region (3.5). Fifty-three percent of all early latent syphilis cases were reported in the St. Louis HIV region and 29% were reported in the Kansas City HIV region. The Southwest HIV region had the third largest number of early latent syphilis cases reported. The rate of reported early latent syphilis cases was higher for blacks compared to whites in all regions that reported cases among blacks.

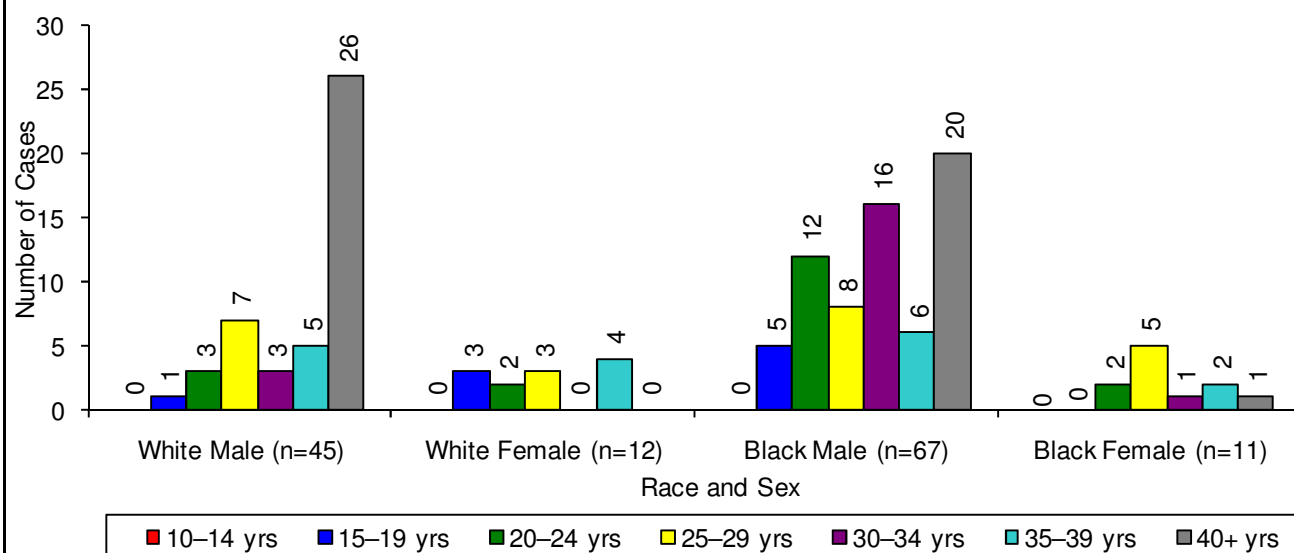
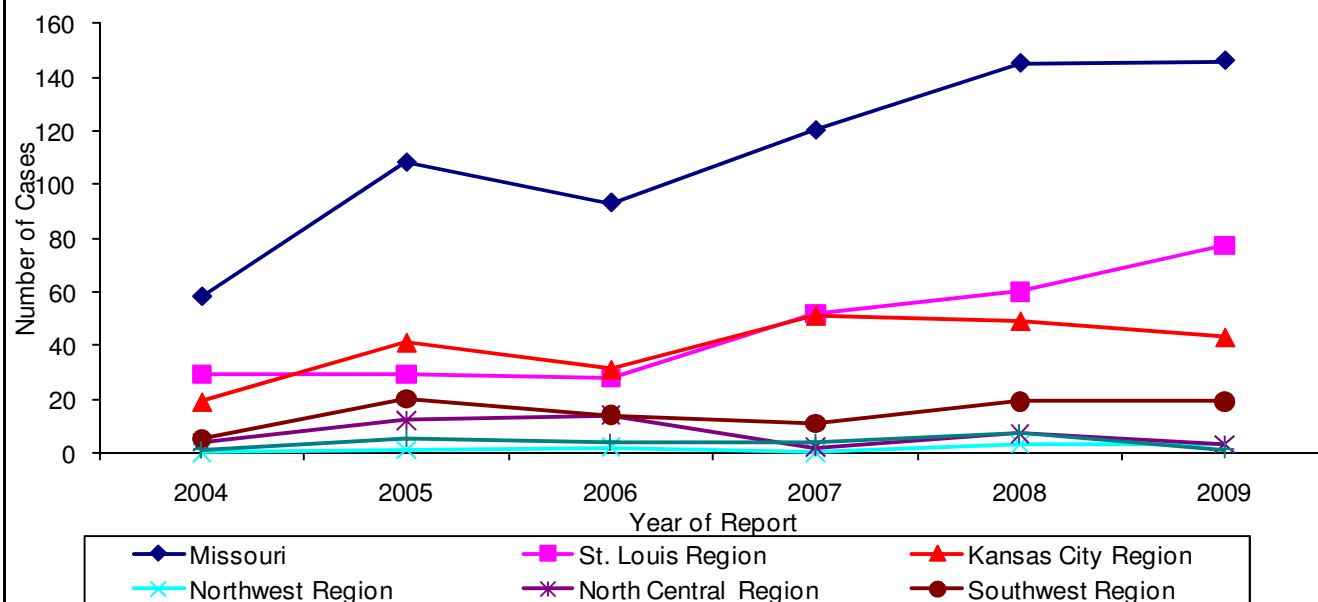
Figure 33. Reported early latent syphilis cases* and rates, by county, Missouri, 2009**



*Case counts are in black.

**Case rates are in red, per 100,000 population based on 2008 MDHSS population estimates.

Early latent syphilis cases were concentrated in metropolitan areas (Figure 33). There were 96 counties that did not report any early latent syphilis cases in 2009. St. Louis City had the highest rate of reported early latent syphilis cases at 16 per 100,000 persons. This means that for every 100,000 persons living in St. Louis City, there were 16 reported with early latent syphilis in 2009.

Figure 34. Reported early latent syphilis cases, by race and sex, by age group at diagnosis, Missouri, 2009**Figure 35. Reported early latent syphilis cases by geographic region and year of report, Missouri, 2004-2009**

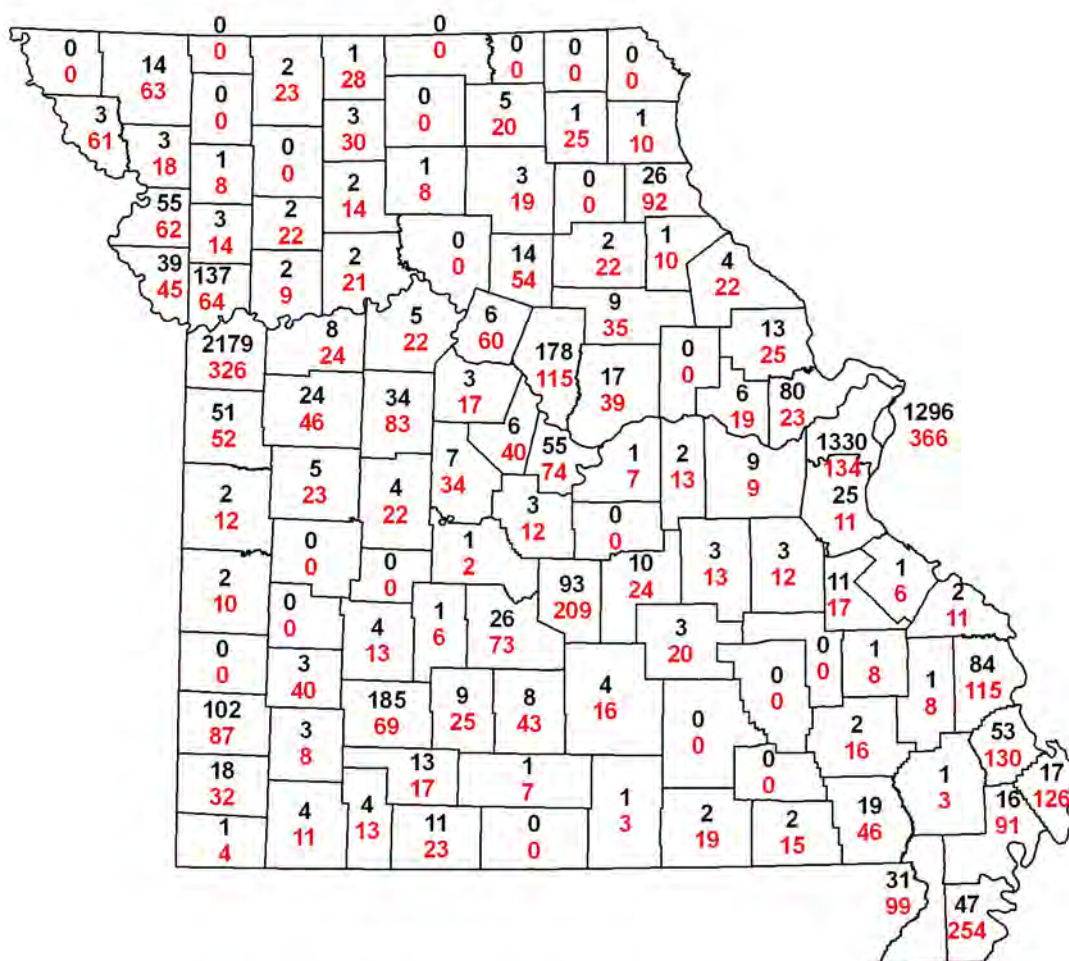
The largest numbers of early latent syphilis cases were reported among black males (67) and white males (45) (Figure 34). The number of reported cases increased from 2008 to 2009 among black males (47 to 67), and decreased among all other race/ethnicity and sex categories presented. Among both white and black males, the largest number of cases was reported among individuals 40 or more years of age at the time of diagnosis. Among black females, the largest number of cases was between 25-29 years of age. The distribution of reported early latent syphilis cases by age at diagnosis was more evenly distributed among white females.

The number of reported early latent syphilis cases in Missouri generally increased from 2004 to 2009, with a slight decrease observed in 2006 (Figure 35). Similar trends were observed in the St. Louis HIV region. The number of reported early latent syphilis cases generally increased from 2004 to 2007 in the Kansas City and region, and then decreased through 2009. In the remaining HIV regions, the number of reported early latent fluctuated slightly between 2004 and 2009.

Table 30. Reported gonorrhea cases and rates, by race*, by geographic region, by sex, Missouri, 2009								
	Male			Female			Total	
	Cases	%	Rate**	Cases	%	Rate**	Cases	Rate**
Missouri								
White	338	11.6%	14.2	830	23.2%	33.5	1,168	24.1
Black	2,116	72.9%	672.7	2,144	59.8%	602.9	4,260	635.6
Other/Unknown*	449	15.5%	--	611	17.0%	--	1,060	--
Total Cases	2,903	100.0%	100.5	3,585	100.0%	118.6	6,488	109.8
St. Louis Region								
White	79	5.8%	10.3	92	6.6%	11.5	171	10.9
Black	996	73.3%	538.3	987	70.4%	445.3	1,983	487.6
Other/Unknown*	283	20.8%	--	322	23.0%	--	605	--
Total Cases	1,358	100.0%	134.0	1,401	100.0%	129.1	2,759	131.5
Kansas City Region								
White	113	10.4%	24.4	282	20.7%	58.4	395	41.8
Black	872	80.1%	1107.9	934	68.6%	1024.3	1,806	1063.0
Other/Unknown*	104	9.6%	--	146	10.7%	--	250	--
Total Cases	1,089	100.0%	180.8	1,362	100.0%	215.5	2,451	198.6
Northwest Region								
White	12	32.4%	10.7	38	70.4%	33.0	50	22.0
Black	21	56.8%	457.4	9	16.7%	352.3	30	419.8
Other/Unknown*	4	10.8%	--	7	13.0%	--	11	--
Total Cases	37	100.0%	30.4	54	100.0%	44.0	91	37.2
North Central Region								
White	29	24.0%	8.9	138	52.3%	40.8	167	25.2
Black	79	65.3%	377.3	96	36.4%	544.2	175	453.6
Other/Unknown*	13	10.7%	--	30	11.4%	--	43	--
Total Cases	121	100.0%	33.0	264	100.0%	70.6	385	52.0
Southwest Region								
White	82	44.8%	16.6	215	66.2%	41.6	297	29.4
Black	76	41.5%	680.2	39	12.0%	451.7	115	580.6
Other/Unknown*	25	13.7%	--	71	21.8%	--	96	--
Total Cases	183	100.0%	33.6	325	100.0%	57.7	508	45.9
Southeast Region								
White	23	20.0%	10.7	65	36.3%	28.9	88	20.0
Black	72	62.6%	509.1	79	44.1%	565.9	151	537.3
Other/Unknown*	20	17.4%	--	35	19.6%	--	55	--
Total Cases	115	100.0%	48.1	179	100.0%	72.3	294	60.4
*Includes cases identified with Hispanic ethnicity.								
**Per 100,000 population based on 2008 MDHSS population estimates.								

There were a total of 6,488 gonorrhea cases reported in 2009 (Table 30). This represented a 19% decrease in the number of reported cases compared to 2008. The decrease observed may be due to the increased use of injectable antibiotics in recent years, which ensures patients receive treatment. The change to a new class of antibiotics, to which gonorrhea is not known to be resistant, may also explain the observed decrease. The majority of cases (55%) were reported among females. The proportion of gonorrhea cases reported among females varied by HIV region. The St. Louis HIV region reported the lowest proportion of female cases (51%), followed by the Kansas City (56%), Northwest (59%), Southeast (61%), Southwest (64%) and North Central (69%) HIV regions. The rate of gonorrhea cases among females was highest in the Kansas City HIV region (215.5), followed by the St. Louis HIV region (129.1). Forty-three percent of all gonorrhea cases were reported in the St. Louis HIV region and 38% were reported in the Kansas City HIV region. The Southwest HIV region had the third largest number of gonorrhea cases reported. The rate of reported gonorrhea cases was higher for blacks compared to whites in all regions.

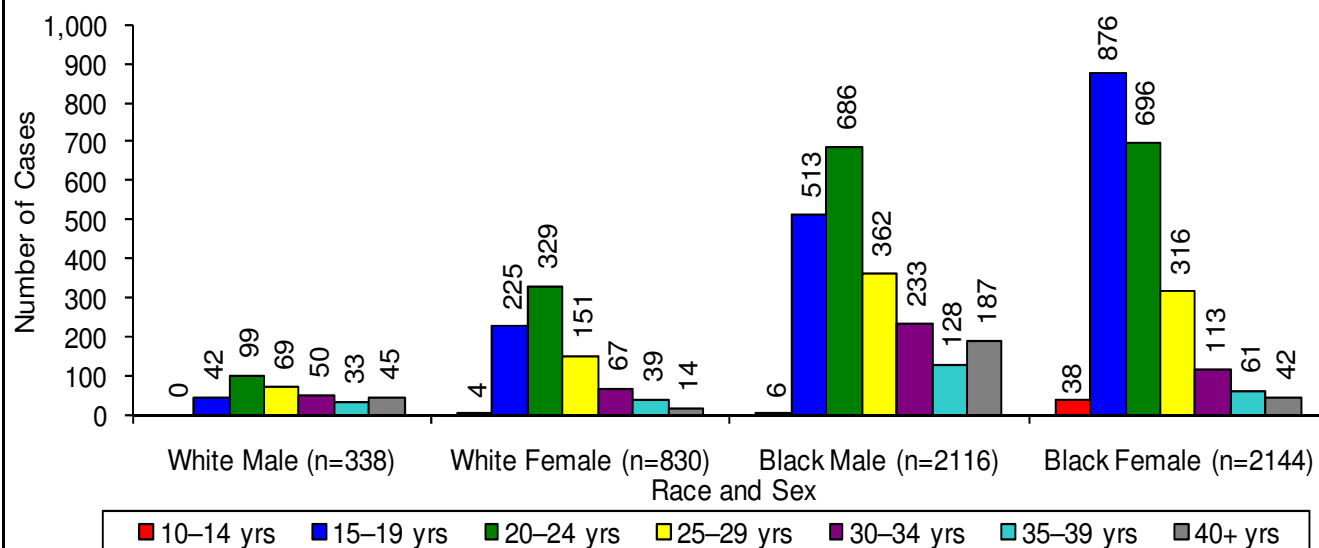
Figure 36. Reported gonorrhea cases* and rates, by county, Missouri, 2009**



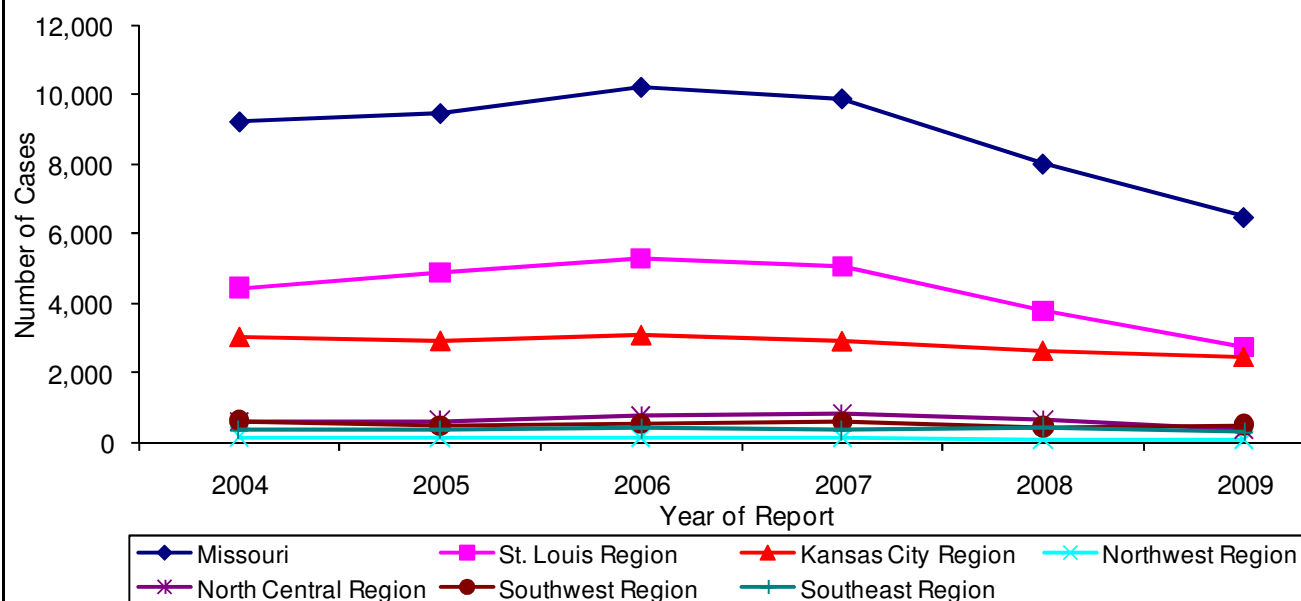
*Case counts are in black.

**Case rates are in red, per 100,000 population based on 2008 MDHSS population estimates.

Gonorrhea cases reported in St. Louis City, St. Louis County, and Jackson County represented 74% of all reported cases in 2009 (Figure 36). There were 22 counties that did not report any gonorrhea cases in 2009. St. Louis City had the highest rate of reported gonorrhea cases at 366 per 100,000 persons. This means that for every 100,000 persons living in St. Louis City, there were 366 reported with gonorrhea in 2009.

Figure 37. Reported gonorrhea cases, by race and sex, by age group at diagnosis, Missouri, 2009

Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

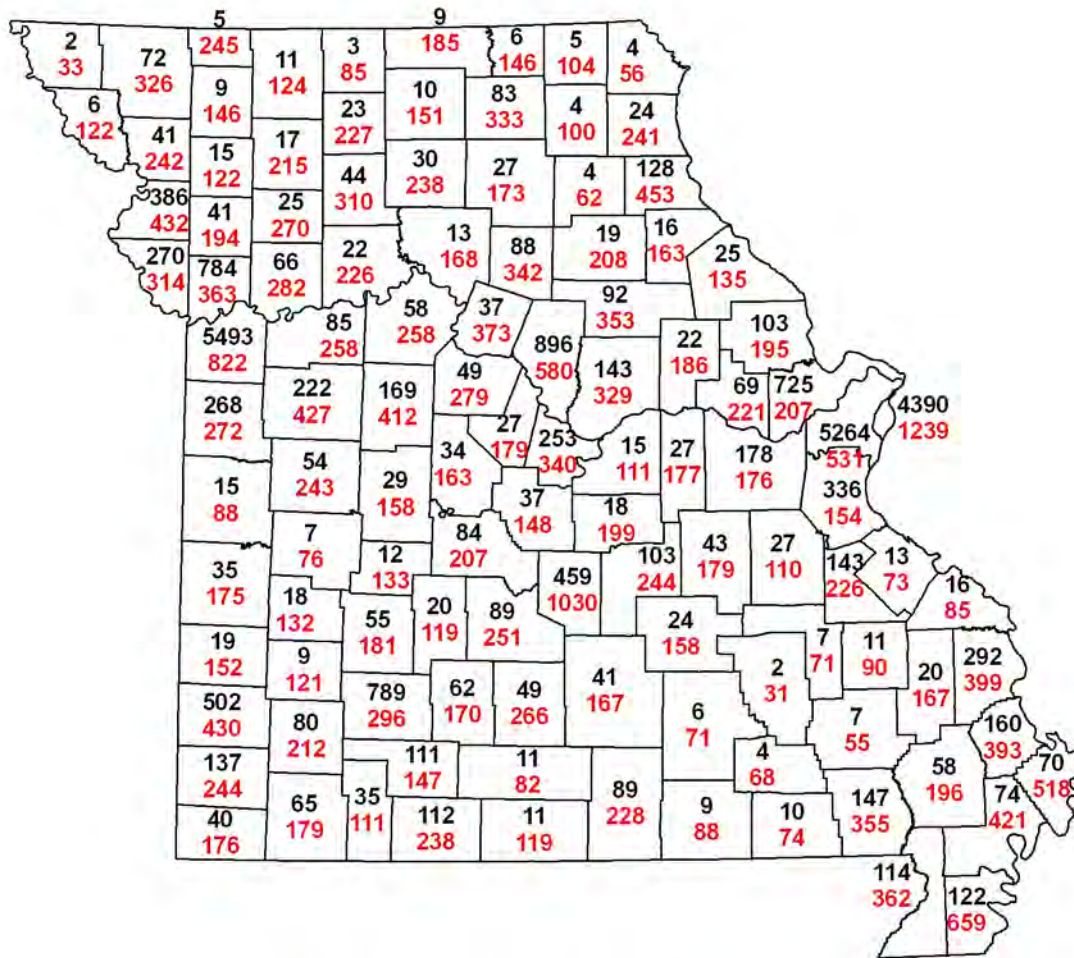
Figure 38. Reported gonorrhea cases by geographic region and year of report, Missouri, 2004-2009

The largest numbers of gonorrhea cases were reported among black females (2,144) and black males (2,116) (Figure 37). The number of reported cases decreased from 2008 to 2009 among all race/ethnicity and sex categories presented. Among white and black males and white females, the largest number of cases was reported among individuals 20-24 years of age at the time of diagnosis. Among black females, the largest number of cases was reported among 15-19 year olds, and was followed by 20-24 year olds. A greater proportion of gonorrhea cases among white males was diagnosed among individuals 40 or more years of age (13%) compared to the other race/ethnicity and sex categories presented.

The number of reported gonorrhea cases in Missouri increased from 2004 to 2006 and then decreased through 2009 (Figure 38). The decrease observed may be due to the increased use of injectable antibiotics in recent years, which ensures patients receive treatment. The change to a new class of antibiotics, to which gonorrhea is not known to be resistant, may also explain the observed decrease. The number of reported gonorrhea cases was lower in 2009 compared to 2004 in all HIV regions. In the Southwest HIV region the number of reported gonorrhea cases increased from 454 in 2008 to 508 in 2009. In the Northwest HIV region the number of reported gonorrhea cases increased from 66 to 91 between 2008 and 2009. In all other HIV regions the number of reported gonorrhea cases decreased from 2008 to 2009.

Table 31. Reported chlamydia cases and rates, by race*, by geographic region, by sex, Missouri, 2009								
	Male			Female			Total	
	Cases	%	Rate**	Cases	%	Rate**	Cases	Rate**
Missouri								
White	1,559	22.1%	65.6	5,834	31.0%	235.4	7,393	152.3
Black	3,847	54.6%	1222.9	7,715	41.0%	2169.5	11,562	1725.2
Other/Unknown*	1,637	23.2%	--	5,276	28.0%	--	6,913	--
Total Cases	7,043	100.0%	243.9	18,825	100.0%	622.6	25,868	437.6
St. Louis Region								
White	364	11.3%	47.5	975	12.4%	121.8	1,339	85.5
Black	2,049	63.7%	1107.5	4,284	54.6%	1932.8	6,333	1557.3
Other/Unknown*	802	24.9%	--	2,591	33.0%	--	3,393	--
Total Cases	3,215	100.0%	317.3	7,850	100.0%	723.6	11,065	527.4
Kansas City Region								
White	373	17.8%	80.5	1,390	26.8%	288.0	1,763	186.4
Black	1,290	61.6%	1639.0	2,513	48.4%	2755.9	3,803	2238.5
Other/Unknown*	432	20.6%	--	1,288	24.8%	--	1,720	--
Total Cases	2,095	100.0%	347.7	5,191	100.0%	821.4	7,286	590.2
Northwest Region								
White	96	57.5%	85.7	383	69.0%	332.6	479	210.9
Black	35	21.0%	762.4	50	9.0%	1956.9	85	1189.5
Other/Unknown*	36	21.6%	--	122	22.0%	--	158	--
Total Cases	167	100.0%	137.0	555	100.0%	452.6	722	295.3
North Central Region								
White	238	40.0%	73.1	1,073	57.7%	317.4	1,311	197.5
Black	240	40.3%	1146.4	435	23.4%	2465.8	675	1749.7
Other/Unknown*	117	19.7%	--	353	19.0%	--	470	--
Total Cases	595	100.0%	162.3	1,861	100.0%	497.7	2,456	331.6
Southwest Region								
White	373	56.2%	75.4	1,514	64.8%	292.8	1,887	186.5
Black	106	16.0%	948.7	154	6.6%	1783.6	260	1312.7
Other/Unknown*	185	27.9%	--	667	28.6%	--	852	--
Total Cases	664	100.0%	122.0	2,335	100.0%	414.9	2,999	270.9
Southeast Region								
White	115	37.5%	53.3	499	48.3%	221.6	614	139.2
Black	127	41.4%	898.0	279	27.0%	1998.4	406	1444.6
Other/Unknown*	65	21.2%	--	255	24.7%	--	320	--
Total Cases	307	100.0%	128.4	1,033	100.0%	417.2	1,340	275.3
*Includes cases identified with Hispanic ethnicity.								
**Per 100,000 population based on 2008 MDHSS population estimates.								

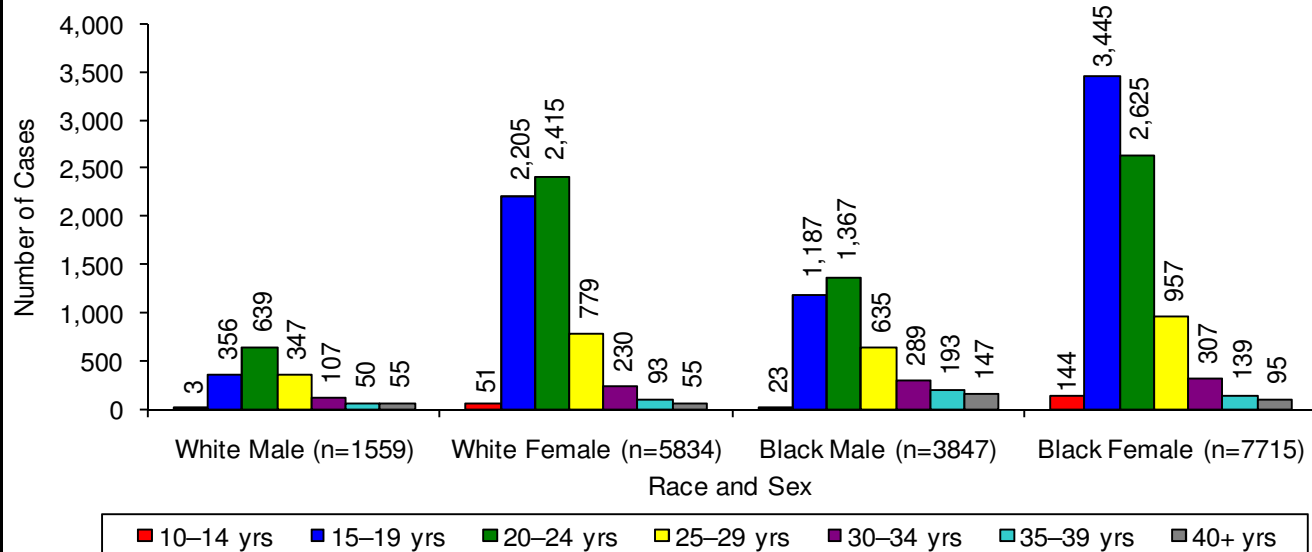
There were a total of 25,868 chlamydia cases reported in 2009 (Table 31). The majority of cases (73%) were reported among females. The proportion of chlamydia cases reported among females varied by HIV region. The Southwest HIV region reported the highest proportion of female cases (78%), followed by the Northwest and Southeast (77%), North Central (76%), and Kansas City and St. Louis (71%) HIV regions. The rate of chlamydia cases among females was highest in the Kansas City HIV region (821.4), followed by the St. Louis HIV region (723.6). Forty-three percent of all chlamydia cases were reported in the St. Louis HIV region and 28% were reported in the Kansas City HIV region. The Southwest HIV region had the third largest number of chlamydia cases reported. The rate of reported chlamydia cases was higher for blacks compared to whites in all regions.

Figure 39. Reported chlamydia cases* and rates, by county, Missouri, 2009**

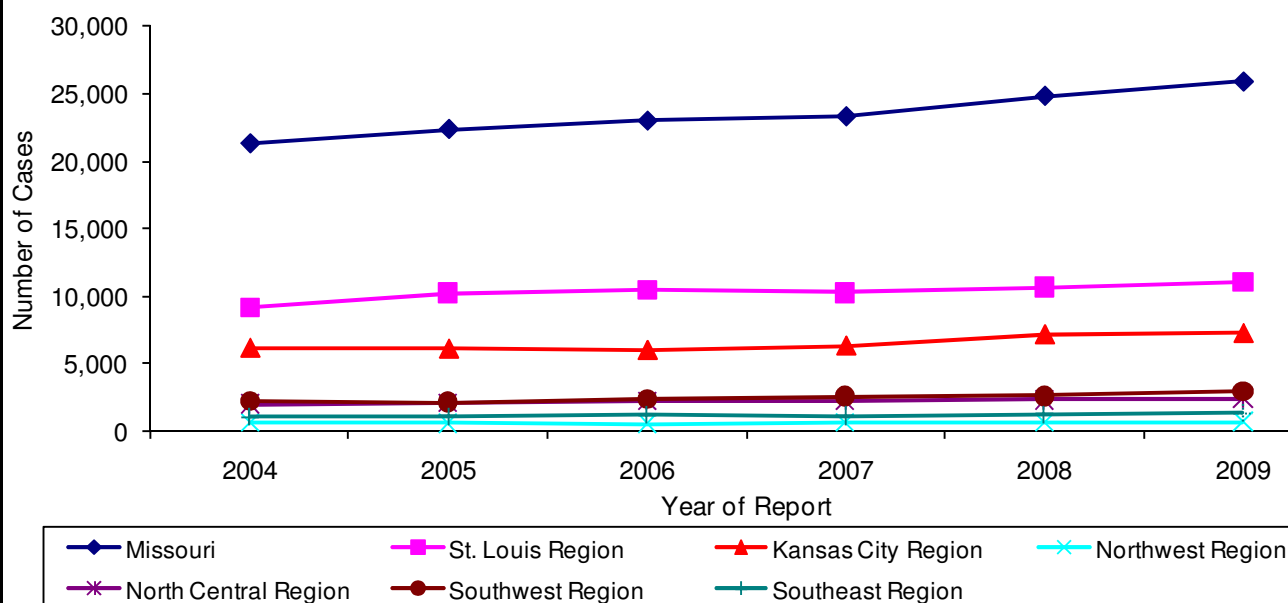
*Case counts are in black.

**Case rates are in red, per 100,000 population based on 2008 MDHSS population estimates.

Chlamydia cases reported in St. Louis City, St. Louis County, and Jackson County represented 59% of all reported cases in 2009 (Figure 39), although these areas represent only 34% of Missouri's general population. All counties reported at least two chlamydia cases in 2009. St. Louis City had the highest rate of reported chlamydia cases at 1,239 per 100,000 persons. This means that for every 100,000 persons living in St. Louis City, there were 1,239 reported with chlamydia in 2009.

Figure 40. Reported chlamydia cases, by race and sex, by age group at diagnosis, Missouri, 2009

Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

Figure 41. Reported chlamydia cases by geographic region and year of report, Missouri, 2004-2009

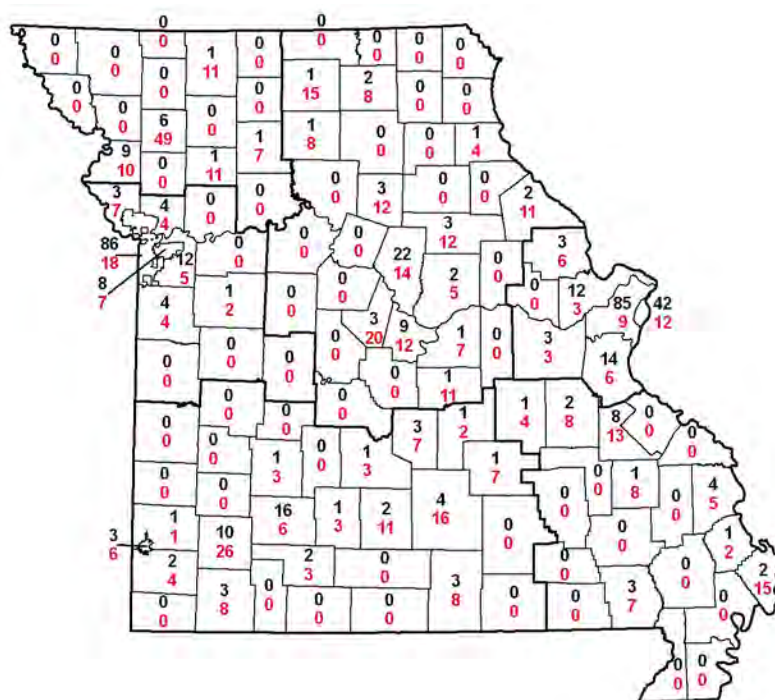
The largest numbers of chlamydia cases were reported among black females (7,715) and white females (5,834) (Figure 40). The number of reported cases increased from 2008 to 2009 among all race/ethnicity and sex categories presented. The number of cases increased from 1,357 to 1,559 among white males, from 5,593 to 5,834 among white females, from 3,801 to 3,847 among black males, and from 7,272 to 7,715 among black females. Among white and black males and white females, the largest number of cases was reported among individuals 20-24 years of age at the time of diagnosis. Among black females, the largest number of cases was reported among 15-19 year olds.

The number of reported chlamydia cases in Missouri increased from 2004 to 2009 (Figure 41). Similar trends were observed for all HIV regions.

	Male			Female			Total	
	Cases	%	Rate**	Cases	%	Rate**	Cases	Rate**
Missouri								
White	52	31.1%	2.2	41	16.1%	1.7	93	1.9
Black	21	12.6%	6.7	47	18.4%	13.2	68	10.1
Other/Unknown*	94	56.3%	--	167	65.5%	--	261	--
Total Cases***	167	100.0%	5.8	255	100.0%	8.4	422	7.1
St. Louis Region								
White	15	22.7%	2.0	9	9.7%	1.1	24	1.5
Black	7	10.6%	3.8	20	21.5%	9.0	27	6.6
Other/Unknown*	44	66.7%	--	64	68.8%	--	108	--
Total Cases	66	100.0%	6.5	93	100.0%	8.6	159	7.6
Kansas City Region								
White	9	25.7%	1.9	13	15.7%	2.7	22	2.3
Black	9	25.7%	11.4	18	21.7%	19.7	27	15.9
Other/Unknown*	17	48.6%	--	52	62.7%	--	69	--
Total Cases	35	100.0%	5.8	83	100.0%	13.1	118	9.6
Northwest Region								
White	4	33.3%	3.6	1	16.7%	0.9	5	2.2
Black	0	0.0%	0.0	0	0.0%	0.0	0	0.0
Other/Unknown*	8	66.7%	--	5	83.3%	--	13	--
Total Cases	12	100.0%	9.8	6	100.0%	4.9	18	7.4
North Central Region								
White	4	20.0%	1.2	2	6.5%	0.6	6	0.9
Black	3	15.0%	14.3	8	25.8%	45.3	11	28.5
Other/Unknown*	13	65.0%	--	21	67.7%	--	34	--
Total Cases	20	100.0%	5.5	31	100.0%	8.3	51	6.9
Southwest Region								
White	15	71.4%	3.0	13	39.4%	2.5	28	2.8
Black	1	4.8%	9.0	0	0.0%	0.0	1	5.0
Other/Unknown*	5	23.8%	--	20	60.6%	--	25	--
Total Cases	21	100.0%	3.9	33	100.0%	5.9	54	4.9
Southeast Region								
White	5	38.5%	2.3	3	33.3%	1.3	8	1.8
Black	1	7.7%	7.1	1	11.1%	7.2	2	7.1
Other/Unknown*	7	53.8%	--	5	55.6%	--	12	--
Total Cases	13	100.0%	5.4	9	100.0%	3.6	22	4.5
[†] Includes confirmed and probable case classifications of Hepatitis B Acute, Hepatitis B Chronic, and Hepatitis B Prenatal. *Includes cases identified with Hispanic ethnicity. **Per 100,000 population based on 2008 MDHSS population estimates. ***One additional Hepatitis B prenatal case was reported to CDC, but was later determined not to meet residency requirements. Therefore the Hepatitis B total published in this document will not match the total reported by CDC.								

Of the 422 Hepatitis B cases reported in 2009, 47 were reported with acute Hepatitis B, 239 with chronic Hepatitis B, and 136 with prenatal Hepatitis B. The number of reported Hepatitis B cases in Missouri decreased by 88 cases from 2008 (510) to 2009 (422) (Table 32). The decrease observed was likely attributed, at least in part, to expanded data quality initiatives in 2009. The number of persons reported with Hepatitis B decreased from 2008 to 2009 in all HIV regions. Overall, the rate of reported Hepatitis B cases was highest in the Kansas City HIV region (9.6 per 100,000). Overall, 60% of reported cases were females, although variation in the ratio of male to female cases existed among the HIV regions. The large proportion of cases with unknown race/ethnicity information makes it difficult to interpret differences in reported infections by race/ethnicity.

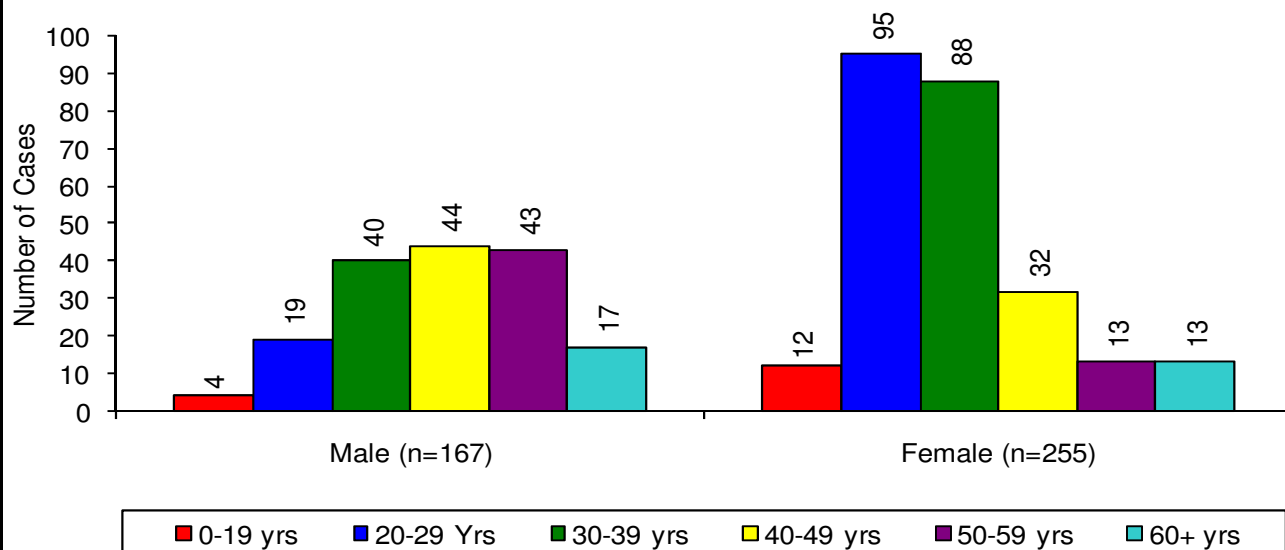
Figure 42. Reported Hepatitis B cases* and rates, by jurisdiction, Missouri, 2009**



*Case counts are in black.

**Case rates are in red, per 100,000 population based on 2008 MDHSS population estimates.

Figure 43. Reported Hepatitis B cases, by sex and by age group at diagnosis, Missouri, 2009



Note: Totals include persons whose age at diagnosis is unknown.

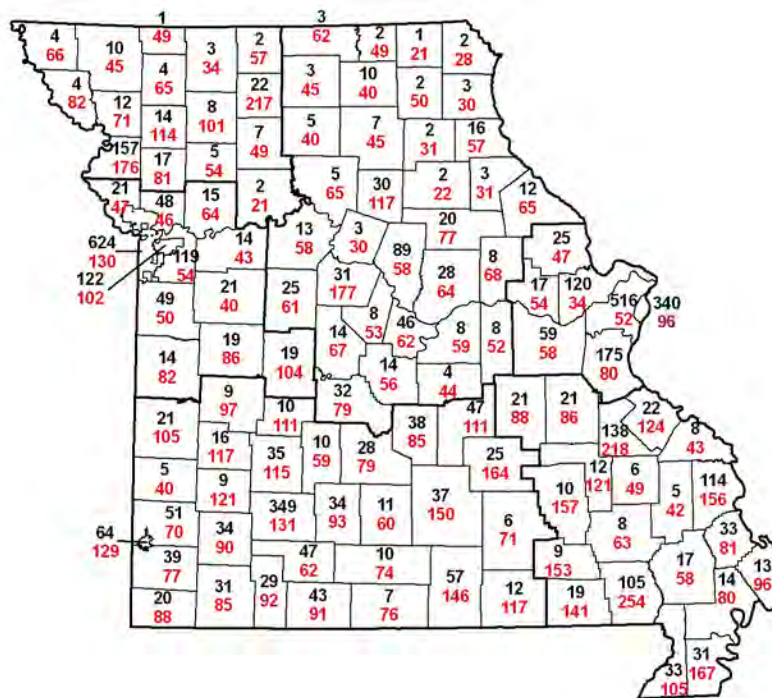
Kansas City had the greatest number of reported Hepatitis B cases (86), followed by St. Louis County (85) (Figure 42). There were 63 jurisdictions that did not report any Hepatitis B cases in 2009.

There were differences in the age distribution of reported Hepatitis B cases by sex (Figure 43). Among males, the largest numbers of reported cases were between 40-49 years of age. The largest numbers of cases were 20-29 years of age at diagnosis among females.

Table 33. Reported Hepatitis C[†] cases and rates, by race*, by geographic region, by sex, Missouri, 2009

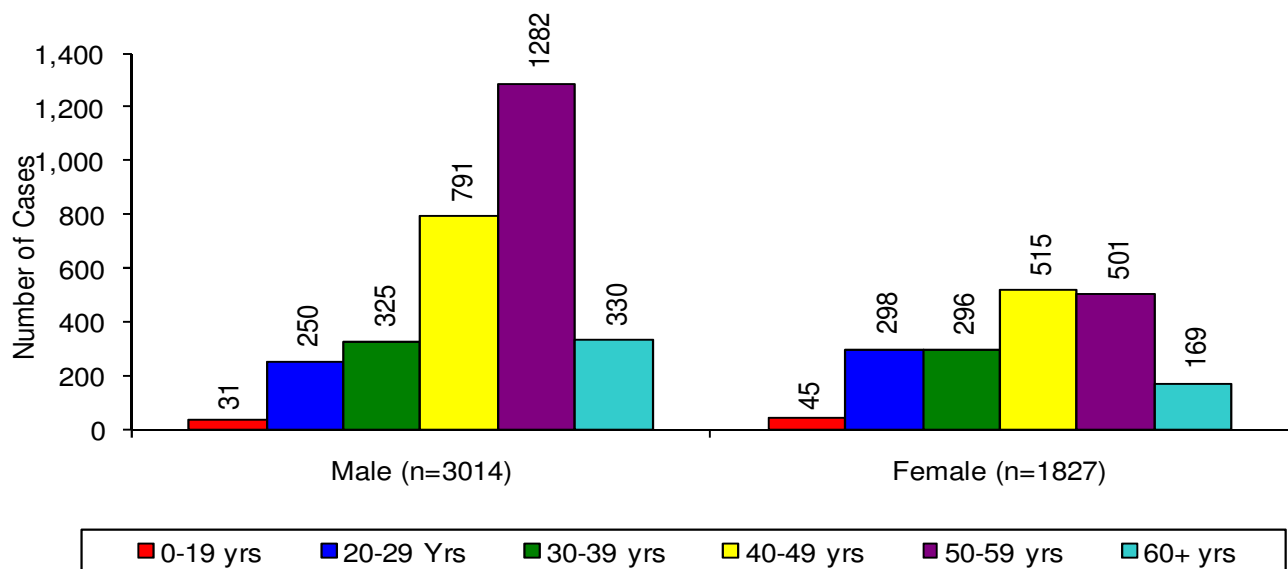
	Male			Female			Total [‡]	
	Cases	%	Rate**	Cases	%	Rate**	Cases	Rate**
Missouri								
White	1,132	37.6%	47.6	798	43.7%	32.2	1,930	39.7
Black	263	8.7%	83.6	119	6.5%	33.5	382	57.0
Other/Unknown*	1,619	53.7%	--	910	49.8%	--	2,529	--
Total Cases	3,014	100.0%	104.4	1,827	100.0%	60.4	4,841	81.9
St. Louis Region								
White	166	21.0%	21.7	114	24.7%	14.2	280	17.9
Black	113	14.3%	61.1	52	11.3%	23.5	165	40.6
Other/Unknown*	512	64.7%	--	295	64.0%	--	807	--
Total Cases	791	100.0%	78.1	461	100.0%	42.5	1,252	59.7
Kansas City Region								
White	222	31.2%	47.9	111	29.7%	23.0	333	35.2
Black	97	13.6%	123.2	51	13.6%	55.9	148	87.1
Other/Unknown*	392	55.1%	--	212	56.7%	--	604	--
Total Cases	711	100.0%	118.0	374	100.0%	59.2	1,085	87.9
Northwest Region								
White	67	38.5%	59.8	52	53.1%	45.2	119	52.4
Black	7	4.0%	152.5	0	0.0%	0.0	7	98.0
Other/Unknown*	100	57.5%	--	46	46.9%	--	146	--
Total Cases	174	100.0%	142.7	98	100.0%	79.9	272	111.2
North Central Region								
White	140	47.5%	43.0	106	64.6%	31.4	246	37.1
Black	25	8.5%	119.4	8	4.9%	45.3	33	85.5
Other/Unknown*	130	44.1%	--	50	30.5%	--	180	--
Total Cases	295	100.0%	80.5	164	100.0%	43.9	459	62.0
Southwest Region								
White	384	60.5%	77.7	320	64.1%	61.9	704	69.6
Black	10	1.6%	89.5	2	0.4%	23.2	12	60.6
Other/Unknown*	241	38.0%	--	177	35.5%	--	418	--
Total Cases	635	100.0%	116.6	499	100.0%	88.7	1,134	102.4
Southeast Region								
White	153	37.5%	70.9	95	41.1%	42.2	248	56.2
Black	11	2.7%	77.8	6	2.6%	43.0	17	60.5
Other/Unknown*	244	59.8%	--	130	56.3%	--	374	--
Total Cases	408	100.0%	170.6	231	100.0%	93.3	639	131.3
[†] Includes confirmed and probable case classifications of Hepatitis C Acute and Hepatitis C Chronic. [*] Includes cases identified with Hispanic ethnicity. [‡] Includes persons with unknown or other sex. ^{**} Per 100,000 population based on 2008 MDHSS population estimates. ^{***} Seven additional chronic Hepatitis C cases were reported to CDC, but were later determined not to meet residency requirements. Therefore the Hepatitis C total published in this document will not match the total reported by CDC.								

All of the 4,841 Hepatitis C cases reported in 2009 were chronic cases. The number of reported Hepatitis C cases in Missouri decreased by 82 cases from 2008 (4,923) to 2009 (4,841) (Table 33). Among the HIV regions, the number of persons reported with Hepatitis C decreased from 2008 to 2009 in the St. Louis (1,415 to 1,252), Northwest (296 to 272), North Central (498 to 459) and Southwest (1,156 to 1,134) HIV regions, but increased in the Kansas City (999 to 1,085), and Southeast (559 to 639) HIV regions. Overall, the rate of reported Hepatitis C cases was highest in the Northwest HIV region (111.2 per 100,000). In Missouri overall, 62% of the reported cases were males. The large proportion of cases with unknown race/ethnicity information makes it difficult to interpret differences in reported infections by race/ethnicity.

Figure 44. Reported Hepatitis C cases* and rates, by jurisdiction, Missouri, 2009**

*Case counts are in black.

**Case rates are in red, per 100,000 population based on 2008 MDHSS population estimates.

Figure 45. Reported Hepatitis C cases, by sex and by age group at diagnosis, Missouri, 2009

Note: Totals include persons whose age at diagnosis is unknown.

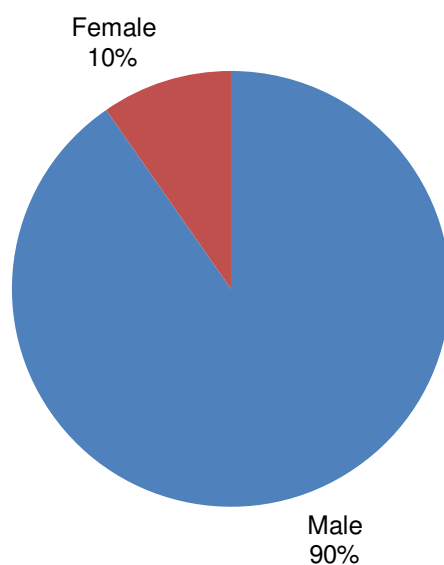
Kansas City had the greatest number of reported Hepatitis C cases with 624 cases (Figure 44). The second largest number of Hepatitis C cases occurred in St. Louis County (516). All jurisdictions reported at least one Hepatitis C case in 2009.

There were differences in the age distribution of reported Hepatitis C cases by sex (Figure 45). Among males, the largest numbers of reported cases were between 50-59 years of age. The largest numbers of cases were 40-49 years of age at diagnosis among females.

Table 34. HIV and STD co-infections, Missouri, 2009

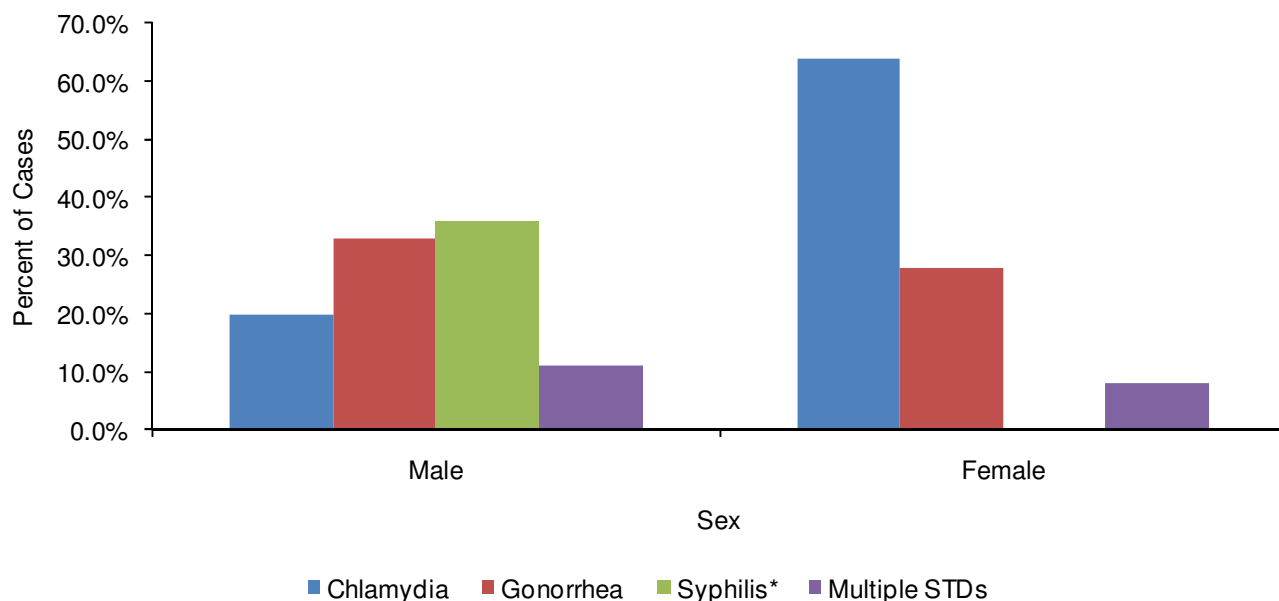
Co-infection	Diagnosed with HIV Prior to 2009		Diagnosed with HIV in 2009		Total	
	N	%	N	%	N	%
Chlamydia	48	24.2%	14	23.3%	62	24.0%
Gonorrhea	64	32.3%	20	33.3%	84	32.6%
Syphilis*	65	32.8%	19	31.7%	84	32.6%
Chlamydia and Gonorrhea	11	5.6%	5	8.3%	16	6.2%
Chlamydia and Syphilis*	3	1.5%	0	0.0%	3	1.2%
Gonorrhea and Syphilis*	5	2.5%	2	3.3%	7	2.7%
Chlamydia, Gonorrhea, and Syphilis*	2	1.0%	0	0.0%	2	0.8%
Total	198	100.0%	60	100.0%	258	100.0%

*Only includes diagnoses of primary, secondary, and early latent syphilis.

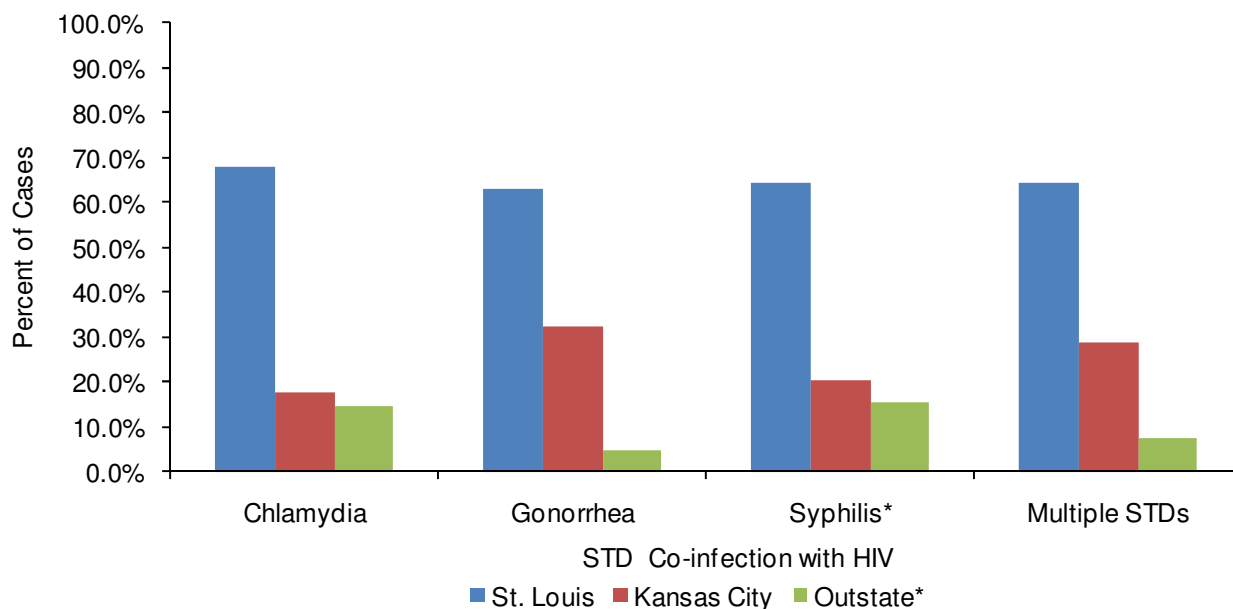
Figure 46. HIV and STD co-infections by sex, Missouri, 2009

Of the 11,122 individuals living with HIV disease, 258 were reported with an STD co-morbidity in 2009 (Table 34). The majority of those reported with an STD co-morbidity were diagnosed with HIV prior to 2009 (77%). However, the proportion of newly diagnosed cases with an STD diagnosed in the same year was greater (11%) than the proportion of living cases diagnosed with an STD in 2009 (2%). There were not significant differences in the type of STD co-morbidity diagnosed based on when the individual was diagnosed with HIV. The largest numbers of HIV co-morbidities were with early syphilis and gonorrhea. The proportion of reported STD infections in 2009 that were living with HIV varied by infection type. Of the 319 early syphilis cases reported in 2009, 30% were among individuals living with HIV. Only 2% of gonorrhea cases and less than 1% of chlamydia cases reported in 2009 were among individuals living with HIV.

Of the 258 reported STD co-morbidity cases, 90% were among males (Figure 46). Males represented a slightly higher proportion of the STD co-morbidity cases (90%) compared to all males living with HIV disease (83%).

Figure 47. HIV and STD co-infections by sex and type of co-infection, Missouri, 2009

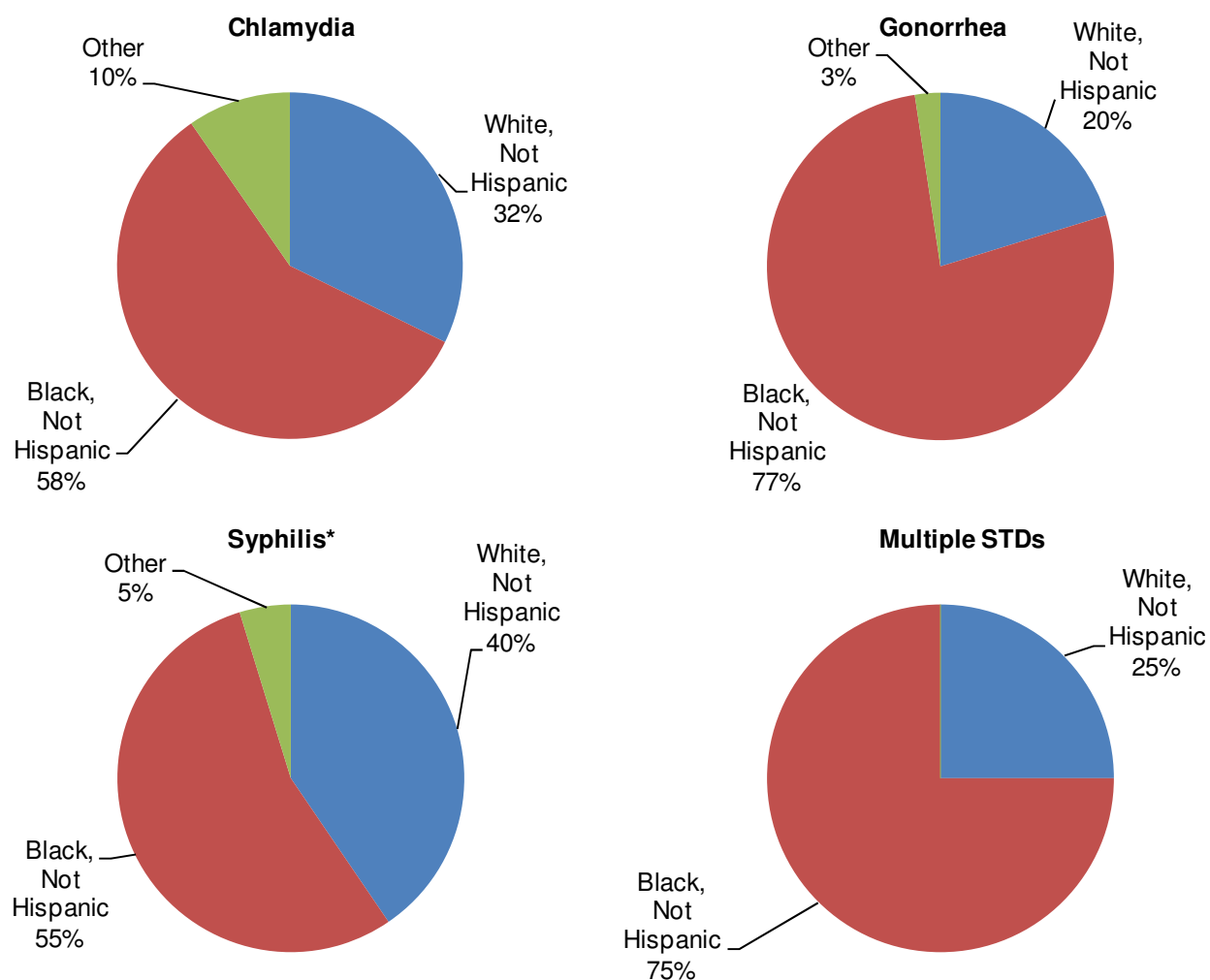
*Only includes diagnoses of primary, secondary, and early latent syphilis.

Figure 48. HIV and STD co-infections by geographic region of STD diagnosis, Missouri, 2009

*Includes those diagnosed in the North Central, Northwest, Southeast, and Southwest regions.

There were differences in the distribution of STD co-morbidity types by sex (Figure 47). Among females living with HIV that were reported with a STD co-morbidity in 2009, 64% were co-infected with chlamydia, 28% with gonorrhea, and 8% with multiple STDs. In contrast, among males living with HIV reported with a STD co-morbidity in 2009, only 20% were co-infected with chlamydia, 33% with gonorrhea, 11% with multiple STDs, and 36% with early syphilis.

Among all HIV and STD co-morbidity types, the greatest proportion of cases was diagnosed in the St. Louis HIV region (Figure 48). Among those living with HIV that were reported with chlamydia in 2009, 68% were residents of the St. Louis HIV region when diagnosed with chlamydia. The St. Louis HIV region represented 63% of all living HIV cases reported with gonorrhea in 2009, 64% of those with early syphilis, and 64% of those with multiple STD co-morbidities. There were differences in the distribution of cases by region for the different co-morbidity types. For example, a greater proportion of gonorrhea co-morbidity cases were diagnosed in the Kansas City HIV region (32%) compared to other co-morbidity types diagnosed in this region. A greater proportion of early syphilis co-morbidity cases were diagnosed in Outstate (16%).

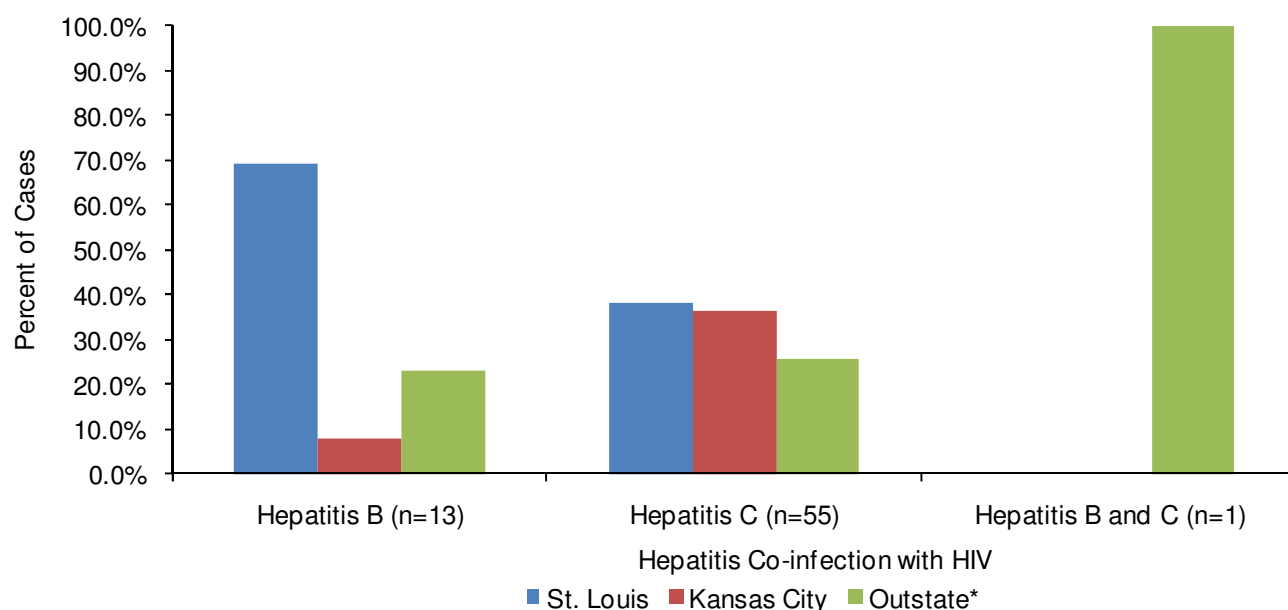
Figure 49. HIV and STD co-infections by race/ethnicity and type of co-infection, Missouri, 2009

*Only includes diagnoses of primary, secondary, and early latent syphilis.

There were differences in the distribution of race/ethnicity among HIV and STD co-morbidities depending on the type of STD diagnosed (Figure 49). The proportion of co-morbidity cases attributed to blacks was highest among those co-infected with gonorrhea (77%), followed by those with multiple co-infections (75%). In all instances minorities were disproportionately represented in the proportion of co-morbidities that were reported. Although blacks represented only 44% of living HIV disease cases, they represented 65% of individuals diagnosed with an STD co-morbidity.

Table 35. Reported hepatitis B and C infections among persons living with HIV disease, Missouri, 2009

Co-infection	Diagnosed with HIV Prior to 2009	Diagnosed with HIV in 2009	Total Co-infections
	N	N	N
Acute Hepatitis B	0	0	0
Chronic Hepatitis B	13	0	13
Prenatal Hepatitis B	0	0	0
Acute Hepatitis C	0	0	0
Chronic Hepatitis C	46	9	55
Chronic Hepatitis B & C	0	1	1

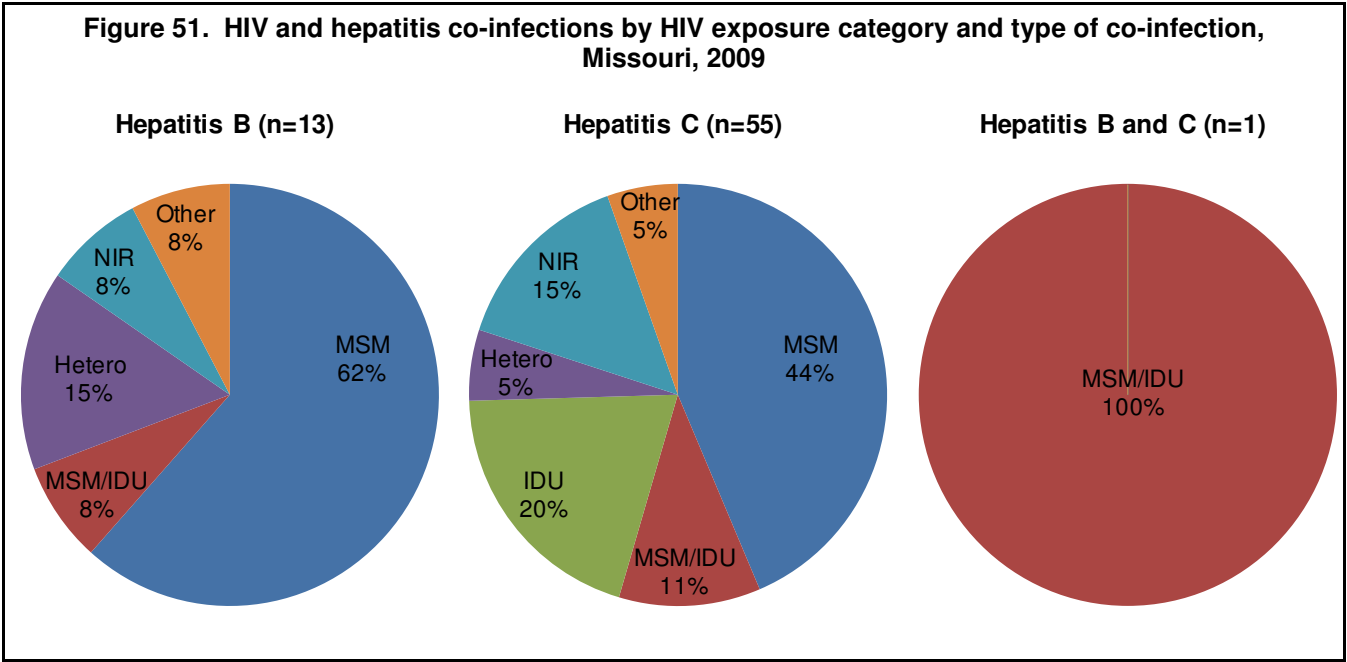
Figure 50. HIV and hepatitis co-infections by geographic region of hepatitis diagnosis, Missouri, 2009

*Includes those diagnosed in the North Central, Northwest, Southeast, and Southwest regions.

Of the 11,122 individuals living with HIV disease, 69 were reported with a hepatitis co-morbidity in 2009 (Table 35). The majority of those reported with a hepatitis co-morbidity were diagnosed with HIV prior to 2009 (86%). The largest numbers of HIV co-morbidities were with chronic Hepatitis C. The proportion of reported hepatitis infections in 2009 that were living with HIV varied by infection type. Of the 239 chronic Hepatitis B cases reported in 2009, 6% were among individuals living with HIV. Only 1% of chronic hepatitis C cases reported in 2009 were among individuals living with HIV.

There were differences in the distributions of hepatitis cases by region for the different co-morbidity types. Among persons living with HIV disease that were reported with a Hepatitis B infection in 2009, the majority were residing in the St. Louis HIV region (69%) at the time of the hepatitis diagnosis (Figure 50). Among HIV-positive persons reported with a Hepatitis C infection in 2009, the proportion of infections diagnosed in the St. Louis HIV region (38%) was similar to the proportion diagnosed in the Kansas City HIV region (36%).

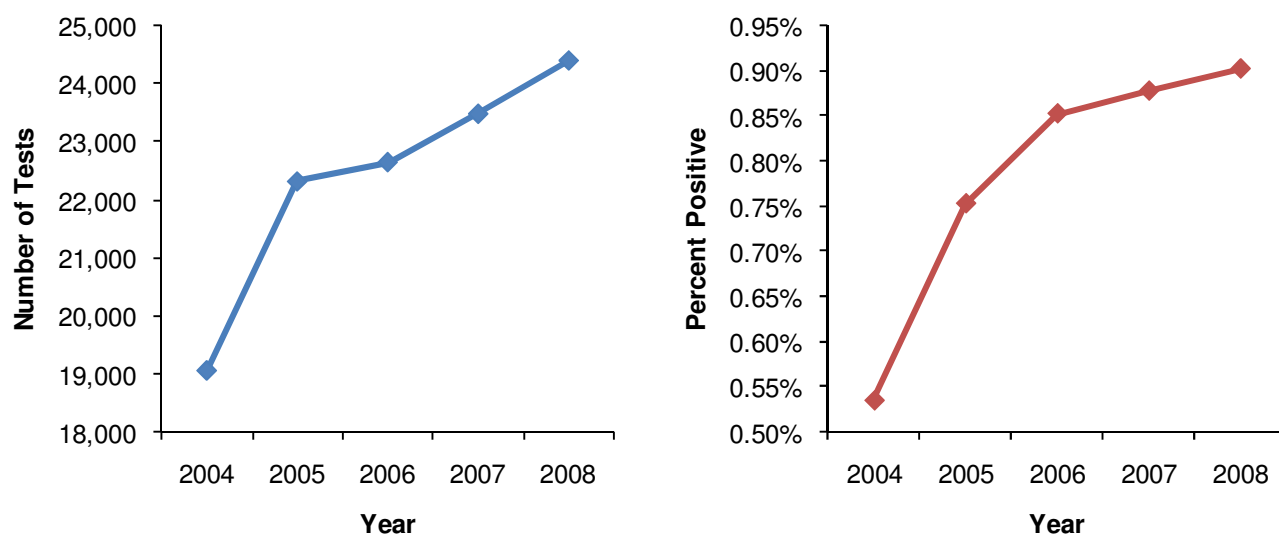
Figure 51. HIV and hepatitis co-infections by HIV exposure category and type of co-infection, Missouri, 2009



Among persons living with HIV disease and reported with a Hepatitis B infection in 2009, 70% were among males who reported having sex with other males (Figure 51). Among Hepatitis C co-morbidity cases 20% were attributed to IDU, and 11% were attributed to both IDU and MSM.

Table 36. Number of HIV tests* and positive tests among counseling, testing and referral program sites, by current gender, race/ethnicity, age, exposure category, and test method, Missouri, 2008			
	Total Tests N	Positive Tests N	%
Total	24,402	220	0.9%
Current Gender			
Male	12,965	188	1.5%
Female	11,391	31	0.3%
Transgender	13	1	7.7%
Unknown	33	0	0.0%
Race/Ethnicity			
White	8,175	77	0.9%
Black	14,666	128	0.9%
Hispanic	911	8	0.9%
Other/Unknown	650	7	1.1%
Age at Test			
<13	23	0	0.0%
13-18	2,363	9	0.4%
19-24	7,683	62	0.8%
25-44	10,835	114	1.1%
45-64	3,256	35	1.1%
65+	189	0	0.0%
Unknown	53	0	0.0%
Exposure Category			
MSM	2,685	130	4.8%
MSM/IDU	80	5	6.3%
IDU	553	1	0.2%
Heterosexual Contact**	580	8	1.4%
Presumed Heterosexual Contact***	8,513	19	0.2%
Unknown	11,991	57	0.5%
Test Method			
Rapid	8,886	129	1.5%
Conventional	15,503	91	0.6%
Unknown	13	0	0.0%
*Includes only tests where a result was available and where the individual did not self-report a previously positive HIV test.			
**Includes males and females who reported no injection drug use and reported high risk heterosexual behaviors with the opposite gender; corresponds with the CDC definition of high risk heterosexual contact.			
***Includes females who reported no history of injection drug use and reported sex with males without additional risk behaviors.			
Source: Missouri Counseling and Testing data			

There were a total of 24,483 HIV tests performed at Missouri Counseling, Testing and Referral Program sites in 2008. However, 56 tests were performed among individuals indicating that they had previously tested positive for HIV disease, and an additional 25 tests performed did not have results available. Table 36 presents testing characteristics only among those tests where the results were available and for tests where the individual did not report a previously positive HIV test; there were 24,402 tests that met these criteria. Overall, less than one percent of tests were positive for HIV disease. The percent of positive tests tended to be greater for males (2%) compared to females (<1%). The high positivity among transgendered persons (8%) should be interpreted with caution due to the small number of tests performed among this group. The percent of positive tests tended to be greater for persons identifying MSM and MSM/IDU behaviors.

Figure 52. Number of HIV tests and percent positive results at Missouri counseling and testing sites, 2004-2008

Source: Missouri Counseling and Testing data

Both the number of tests and the percent of tests that were positive increased in Missouri between 2004 and 2008 (Figure 52). The number of tests in 2004 was incomplete, as some testing data from the Kansas City area was not entered in the MDHSS counseling and testing dataset. There are several possible explanations for the reason the percent positivity of HIV tests increased from 2004 to 2008. First, more targeted testing of high risk groups may explain the increase observed. Second, it is possible that the level of HIV disease in the community has actually increased. Third, it is possible that more individuals in recent years with a positive test result returned to sites multiple times to be tested.

Table 37. Number of HIV tests and positive tests at expanded testing sites, by test method, by location, Missouri, 2008

Test Method	Kansas City			St. Louis			Total		
	Total Tests N	Positive Tests N	%	Total Tests N	Positive Tests N	%	Total Tests N	Positive Tests N	%
Rapid	1,907	21	1.1%	1,733	16	0.9%	3,640	37	1.0%
Conventional	1	1	100.0%	17	2	11.8%	18	3	16.7%
Total	1,908	22	1.2%	1,750	18	1.0%	3,658	40	1.1%

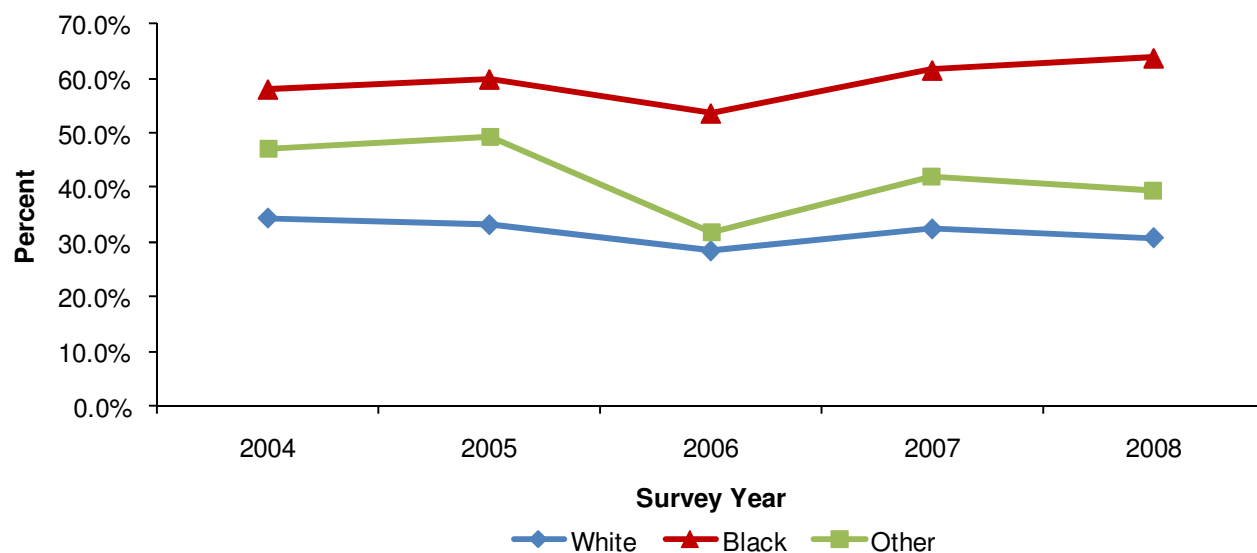
The expanded testing initiative was designed to provide testing in a routine healthcare setting, with a specific focus on populations at high risk for infection. In 2008, there were a total of 3,658 tests performed as part of the expanding testing initiative (Table 37). Of all tests, 52% were performed at sites in Kansas City. Overall, 1% of all tests were positive for HIV. This was slightly higher than the percent positivity at all testing sites in Missouri in 2008 (<1%). Nearly all tests performed as part of the expanded testing initiative were rapid tests.

Table 38. Percent of adults 18-64 years of age ever tested for HIV, by sex, by race/ethnicity, by age, by income, by educational attainment, Missouri, 2008

	N	%	Crude Prevalence	
			95% Lower CI	95% Upper CI
Total	3,353	34.1%	31.8%	36.5%
Sex				
Male	1,292	32.0%	28.5%	35.5%
Female	2,061	36.2%	33.2%	39.3%
Race/Ethnicity				
White	2,826	30.8%	28.3%	33.3%
Black	331	63.7%	56.4%	71.1%
Other	181	39.4%	29.7%	49.2%
Age				
18-24	179	29.8%	21.5%	38.1%
25-44	1,148	47.0%	43.3%	50.7%
45-64	2,026	21.9%	19.5%	24.3%
Income				
<\$15,000	290	56.2%	47.7%	64.7%
\$15-24,999	449	44.6%	37.4%	51.8%
\$25-34,999	386	40.3%	32.8%	47.7%
\$35-49,999	585	27.6%	22.4%	32.9%
\$50,000+	1,366	32.3%	29.0%	35.6%
Highest Education				
Did not graduate High School	253	37.6%	27.5%	47.6%
Graduated High School	1,140	29.1%	25.1%	33.0%
Attended College or Technical School	927	37.9%	33.4%	42.4%
Graduated from College or Technical School	1,031	35.2%	31.2%	39.2%

Source: BRFSS

An estimated 34% of Missouri adults between the ages of 18 and 64 years old have ever been tested for HIV by 2008 (Table 38). There was not a significant difference in the percent of adults ever tested for HIV by sex. A significantly greater percent of blacks reported ever being tested for HIV (64%) compared to whites (31%) and persons of another race/ethnicity (39%). Persons 25 to 44 years of age were significantly more likely to have ever been tested for HIV (47%) compared to persons 18 to 24 years of age (30%) and persons 45 to 64 years of age (22%). The percent of adults ever tested for HIV disease was greatest among person reporting an income of less than \$15,000 (56%). The percent ever tested for HIV generally tended to decrease with increasing income, but was similar for persons reporting incomes between \$35,000-\$49,000 and persons reporting incomes of \$50,000 or more. There was not a significant difference in the percent of adults ever tested for HIV by educational attainment.

Figure 53. Percent of adults 18-64 years of age ever tested for HIV, Missouri, 2004-2008

Source: BRFSS

The percent of adults that were ever tested for HIV has remained generally steady between 2004 and 2008 for persons of all race/ethnicities (Figure 53). There was a slight decrease in the percent of adults ever tested for HIV in 2006 among all race/ethnicities, but this decrease appears to be related to uncertainty associated with survey estimates, and not a true decrease in testing rates. These data indicate that more work is needed to achieve the CDC recommendation that all adults 18 to 64 years of age receive routine HIV testing, especially among white adults.

Table 39. Percent of adults 18-64 years of age tested for HIV in the past year* who received a rapid test at their last HIV test, by sex, by race/ethnicity, by age, Missouri, 2008

	N	%	Crude Prevalence	
			95% Lower CI	95% Upper CI
Total	228	19.5%	11.6%	27.5%
Sex				
Male	86	21.8%	10.6%	33.1%
Female	142	17.8%	6.6%	29.1%
Race/Ethnicity				
White	126	19.7%	7.8%	31.6%
Black	88	17.6%	6.9%	28.3%
Other	--	--	--	--
Age				
18-24	--	--	--	--
25-44	121	14.3%	6.7%	21.9%
45-64	70	19.9%	10.0%	29.8%

*2007 or 2008
 -- Number of responses less than 50 and not sufficient to report
 Source: BRFSS

Among Missouri adults 18 to 64 years of age who were tested for HIV in 2007 or 2008, 20% reported receiving a rapid HIV test at their most recent testing experience (Table 39). The small number of respondents answering the survey question regarding rapid testing makes it difficult to assess differences in rapid test usage based upon various demographic characteristics.

Table 40. Mean length of time since last HIV test among adults 18-64 who have ever been tested for HIV, by sex, by race/ethnicity, by age, by income, by educational attainment, Missouri, 2008

	N	Years	Mean 95% Lower CI	95% Upper CI
Total	927	4.9	4.5	5.3
Sex				
Male	334	5.2	4.5	5.9
Female	593	4.7	4.2	5.2
Race/Ethnicity				
White	697	5.7	5.1	6.2
Black	172	2.0	1.4	2.5
Other	55	3.7	2.2	5.2
Age				
18-24	60	1.6	0.9	2.4
25-44	494	4.8	4.3	5.3
45-64	373	7.1	6.2	8.0
Income				
<\$15,000	129	3.7	2.5	4.8
\$15-24,999	160	3.5	2.8	4.2
\$25-34,999	106	3.7	2.6	4.9
\$35-49,999	142	5.7	4.6	6.7
\$50,000+	346	6.0	5.3	6.7
Highest Education				
Did not graduate High School	76	4.0	2.8	5.3
Graduated High School	260	4.0	3.3	4.7
Attended College or Technical School	288	5.1	4.3	5.9
Graduated from College or Technical School	303	5.9	5.0	6.7

Source: BRFSS

Among Missouri adults 18 to 64 years of age who had ever been tested for HIV, the length of time between their last HIV test and the survey was calculated. The length of time since last HIV test does **not** represent the interval length between HIV testing episodes, but the length of time since an individual's last HIV test to a given point in time. Overall among individuals ever tested for HIV, it had been an average of 4.9 years since their last HIV test (Table 40). There was not a significant difference in the mean length since an individual's last HIV test by sex. Blacks tended to report a more recent HIV test (2.0 years ago) compared to whites (5.7 years ago). The average length of time since the last HIV test increased significantly with increasing age; among adults 18 to 24 years of age the average length since last HIV testing was 1.6 years, compared to 7.1 years of adults 45 to 64 years of age. The average length since the last HIV test was greater for persons reporting an income of \$50,000 or more compared to persons reporting an income of \$34,999 or less. Persons who graduated from college or technical school had a longer interval since their last HIV test compared to persons who graduated from high school, but did not attend college or technical school.

Table 41. Location of last HIV test among adults 18-64 years of age who have ever been tested for HIV, by sex, by race/ethnicity, by age, by income, by educational attainment, Missouri, 2008						
	Private Doctor or HMO	Hospital	Clinic	Counseling and Testing Site	Correctional Facility	Other
	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)
Total	42.0% (37.9-46.2%)	17.8% (14.7-20.8%)	20.6% (17.0-24.2%)	2.3% (1.0-3.7%)	5.0% (2.5-7.5%)	12.2% (9.5-15.0%)
Sex						
Male	32.0% (25.9-38.1%)	16.7% (12.2-21.2%)	22.0% (16.2-27.8%)	3.4% (0.7-6.0%)	8.8% (4.1-13.4%)	17.2% (12.0-22.4%)
Female	50.7% (45.3-56.1%)	18.7% (14.5-22.9%)	19.4% (14.9-23.8%)	1.5% (0.5-2.5%)	1.8% (0.0-4.0%)	8.0% (5.6-10.3%)
Race/Ethnicity						
White	43.1% (38.3-47.8%)	16.9% (13.5-20.3%)	21.3% (17.0-25.6%)	2.1% (0.7-3.4%)	4.0% (1.5-6.4%)	12.7% (9.4-16.0%)
Black	42.2% (32.0-52.3%)	17.0% (9.1-24.9%)	20.7% (13.1-28.4%)	0.9% (0.0-1.7%)	9.7% (0.8-18.5%)	9.6% (4.8-14.5%)
Other	31.8% (15.9-47.8%)	25.9% (13.1-38.7%)	13.1% (3.7-22.5%)	9.3% (0.0-21.3%)	5.9% (0.0-17.1%)	13.9% (3.3-24.5%)
Age						
18-24	33.6% (18.8-48.3%)	9.8% (0.0-20.2%)	42.2% (26.6-57.8%)	0.7% (0.0-2.2%)	-- (--)	13.7% (1.8-25.5%)
25-44	44.7% (39.3-50.1%)	17.2% (13.3-21.2%)	18.2% (13.9-22.5%)	2.7% (0.7-4.6%)	7.2% (3.2-11.2%)	10.0% (6.9-13.1%)
45-64	40.1% (34.0-46.2%)	23.1% (18.1-28.1%)	15.1% (10.9-19.4%)	2.4% (0.0-4.8%)	2.4% (0.8-4.1%)	16.9% (12.2-21.5%)
Income						
<\$15,000	29.5% (18.6-40.3%)	34.3% (20.6-48.1%)	17.2% (10.0-24.5%)	1.2% (0.0-2.6%)	10.3% (0.0-22.0%)	7.5% (3.1-12.0%)
\$15-24,999	29.9% (20.4-39.4%)	6.6% (3.1-10.1%)	31.0% (19.9-42.1%)	2.6% (0.0-5.2%)	14.1% (4.6-23.7%)	15.8% (7.7-23.9%)
\$25-34,999	41.9% (28.6-55.2%)	20.2% (9.9-30.6%)	21.0% (10.9-31.1%)	1.1% (0.0-2.7%)	7.4% (0.0-16.4%)	8.5% (3.6-13.3%)
\$35-49,999	50.4% (39.5-61.3%)	19.5% (11.0-28.0%)	13.8% (6.2-21.4%)	2.3% (0.0-6.3%)	3.3% (0.0-8.7%)	10.8% (1.8-19.8%)
\$50,000+	49.3% (43.0-55.7%)	16.3% (12.1-20.6%)	17.3% (12.3-22.4%)	2.9% (0.3-5.5%)	0.4% (0.0-1.0%)	13.7% (9.5-17.8%)
Highest Education						
Did not graduate High School	26.4% (13.0-39.9%)	12.8% (4.0-21.7%)	25.1% (10.5-39.8%)	0.7% (0.0-2.0%)	22.4% (5.9-39.0%)	12.5% (0.3-24.8%)
Graduated High School	39.5% (31.7-47.3%)	15.2% (9.4-21.1%)	23.0% (16.6-29.4%)	2.6% (0.2-4.9%)	6.5% (0.9-12.1%)	13.2% (7.5-18.9%)
Attended College or Technical School	43.5% (35.9-51.0%)	17.4% (12.3-22.5%)	18.9% (12.3-25.6%)	2.8% (0.0-6.0%)	3.3% (0.5-6.2%)	14.0% (9.1-19.0%)
College or Technical School	47.3% (40.4-54.3%)	21.8% (15.9-27.6%)	18.8% (12.8-24.8%)	2.2% (0.1-4.2%)	0.4% (0.0-0.8%)	9.6% (6.0-13.2%)
-- Number of responses less than 50 and not sufficient to report						
Source: BRFSS						

Among Missouri adults 18 to 64 years of age ever tested for HIV, the most common location of last HIV testing was a private doctor or HMO (42%, Table 41). A greater percent of males tended to test at a correctional facility (9%) compared to females (2%). A greater percent of persons 18 to 24 years of age were last tested at a clinic (42%) compared to persons 25 to 44 years of age (18%) and persons 45 to 64 years of age (15%).

Table 42. Table. Percent of adults 18-64 years of age reporting intravenous drug use, an STD, giving or receiving money or drugs in exchange for sex, or anal sex without a condom in the past year, by sex, by race/ethnicity, by age, by income, by educational attainment, Missouri, 2008

	N	%	Crude Prevalence	
			95% Lower CI	95% Upper CI
Total	3,415	3.1%	2.2%	4.0%
Sex				
Male	1,316	3.2%	1.7%	4.7%
Female	2,099	3.0%	2.0%	4.0%
Race/Ethnicity				
White	2,882	2.5%	1.6%	3.4%
Black	332	6.7%	2.1%	11.2%
Other	185	6.6%	1.6%	11.6%
Age				
18-24	178	6.0%	2.4%	9.6%
25-44	1,176	3.6%	2.0%	5.1%
45-64	2,061	1.5%	0.9%	2.2%
Income				
<\$15,000	297	3.0%	1.0%	5.0%
\$15-24,999	459	7.8%	3.8%	11.7%
\$25-34,999	392	3.6%	0.2%	7.0%
\$35-49,999	597	2.7%	1.2%	4.2%
\$50,000+	1,385	1.4%	0.4%	2.4%
Highest Education				
Did not graduate High School	259	9.6%	3.0%	16.1%
Graduated High School	1,157	3.0%	1.7%	4.4%
Attended College or Technical School	945	3.5%	1.7%	5.3%
Graduated from College or Technical School	1,052	1.0%	0.5%	1.6%

Source: BRFSS

An estimated 3% of Missouri adults between the age of 18 and 64 engaged in risk behaviors associated with HIV, including intravenous drug use, diagnosis with an STD, giving or receiving money or drugs in exchange for sex, or anal sex without a condom (Table 42). Although the estimated percent of adults engaging in HIV-related risk behavior tended to be higher for minorities, the difference between minorities and whites was not significant. The estimated percent of the population engaging in HIV-related risk behaviors tended to generally decrease with increasing age.

Table 43. Percent of adults who reported binge drinking* in the past 30 days, by sex, by race/ethnicity, by age, by income, by educational attainment, Missouri, 2008				
	N	%	Crude Prevalence	
			95% Lower CI	95% Upper CI
Total	5,077	15.3%	13.7%	16.9%
Sex				
Male	1,891	20.7%	18.1%	23.4%
Female	3,186	10.3%	8.4%	12.2%
Race/Ethnicity				
White	4,319	15.4%	13.6%	17.1%
Black	443	13.4%	8.4%	18.4%
Other	273	17.4%	10.6%	24.2%
Age				
18-24	180	24.2%	16.1%	32.2%
25-44	1,189	20.8%	17.9%	23.8%
45-64	2,097	12.5%	10.5%	14.5%
65+	1,578	3.5%	2.4%	4.5%
Income				
<\$15,000	524	12.0%	7.7%	16.2%
\$15-24,999	847	15.0%	10.5%	19.6%
\$25-34,999	660	11.8%	7.7%	15.8%
\$35-49,999	798	18.8%	14.4%	23.3%
\$50,000+	1,630	16.6%	14.1%	19.0%
Highest Education				
Did not graduate High School	545	13.4%	7.7%	19.2%
Graduated High School	1,837	16.1%	13.3%	18.9%
Attended College or Technical School	1,316	14.9%	12.1%	17.8%
Graduated from College or Technical School	1,374	15.4%	12.3%	18.5%
*Measured as five or more drinks on one occasion for males and as four or more drinks on one occasion for females. Source: BRFSS				

Based on BRFSS survey data, an estimated 15% of Missouri adults engaged in binge drinking of alcohol in 2008 (Table 43). Binge drinking was measured as five or more drinks on one occasion for males and as four or more drinks on one occasion for females. Males were significantly more likely to report binge drinking (21%) compared to females (10%). There was not a significant difference in the percent of adults reporting binge drinking by race/ethnicity. The percent of adults engaging in binge drinking tended to decrease with increasing age; among adults 18 to 24 years of age 24% reported binge drinking, compared to 13% of adults 45 to 64 years of age. The percent of adults engaging in binge drinking did not vary significantly by income level or by educational attainment.

Table 44. Percent of pregnant women who reported NOT having a discussion about HIV testing with their health provider, by age, by education level, by race/ethnicity, by marital status, by residence, and by prenatal payer source, Missouri, 2005			
Maternal Characteristic	%	95% CI	
Total	25.1	22.3	28.0
Age			
<20	24.3	15.4	33.2
20-29	25.3	21.5	29.2
30+	25.1	20.3	29.9
Education Level			
Less than High School	21.7	14.4	29.1
High School or Higher	25.7	22.7	28.8
Race/Ethnicity			
White	27.4	24.3	30.6
Black	13.6	5.4	21.8
Hispanic	13.6	2.6	24.5
Other	37.5	14.2	60.8
Marital Status			
Married	28.4	25.0	31.8
Unmarried	20.1	15.2	25.0
Residence			
Urban	23.6	20.2	27.1
Rural	29.4	24.5	34.4
Prenatal Care Payer			
Private Insurance	26.6	22.7	30.5
Medicaid	22.9	18.7	27.1
Self Pay or Other	35.5	18.0	53.0
Source: MoPRA			

Overall, an estimated 25% of pregnant women did not discuss HIV testing with their healthcare provider during pregnancy (Table 44). There were not significant differences in the percent of pregnant women that did not discuss HIV testing with the healthcare provider by age, education level, residence, or prenatal care payer source. A slightly greater percentage of married pregnant women did not discuss HIV testing with their healthcare provider (28%) compared to unmarried pregnant women (20%). White pregnant women were significantly less likely to talk to their healthcare provider about HIV testing compared to black and Hispanic pregnant women. Over 27% of white women did not talk to their healthcare provider about HIV testing.

Table 45. Number of individuals in Missouri correctional facilities* living with HIV disease and the percent of the population living with HIV disease, by race, by sex, Missouri, 2006-2009

Sex	Year	Race						Total	
		White**		Black**		Other/Unknown		N	%
		N	%	N	%	N	%		
Male	2006	83	0.5%	198	1.7%	0	0.0%	281	1.0%
	2007	79	0.5%	190	1.6%	1	0.6%	270	1.0%
	2008	81	0.5%	213	1.8%	1	0.6%	295	1.1%
	2009	91	0.6%	211	1.8%	1	0.6%	303	1.1%
Female	2006	7	0.4%	7	0.9%	0	0.0%	14	0.5%
	2007	12	0.7%	8	1.1%	0	0.0%	20	0.8%
	2008	10	0.6%	8	1.2%	0	0.0%	18	0.7%
	2009	5	0.3%	8	1.3%	0	0.0%	13	0.5%
Total	2006	90	0.5%	205	1.6%	0	0.0%	295	1.0%
	2007	91	0.5%	198	1.6%	1	0.5%	290	0.9%
	2008	91	0.5%	221	1.8%	1	0.5%	313	1.0%
	2009	96	0.5%	219	1.8%	1	0.5%	316	1.0%

*Includes only offenders in the custody of Missouri Department of Corrections. Does not include offenders in local jails, private facilities, or federal facilities.

**Includes persons of Hispanic origin.

Source: Missouri Department of Corrections

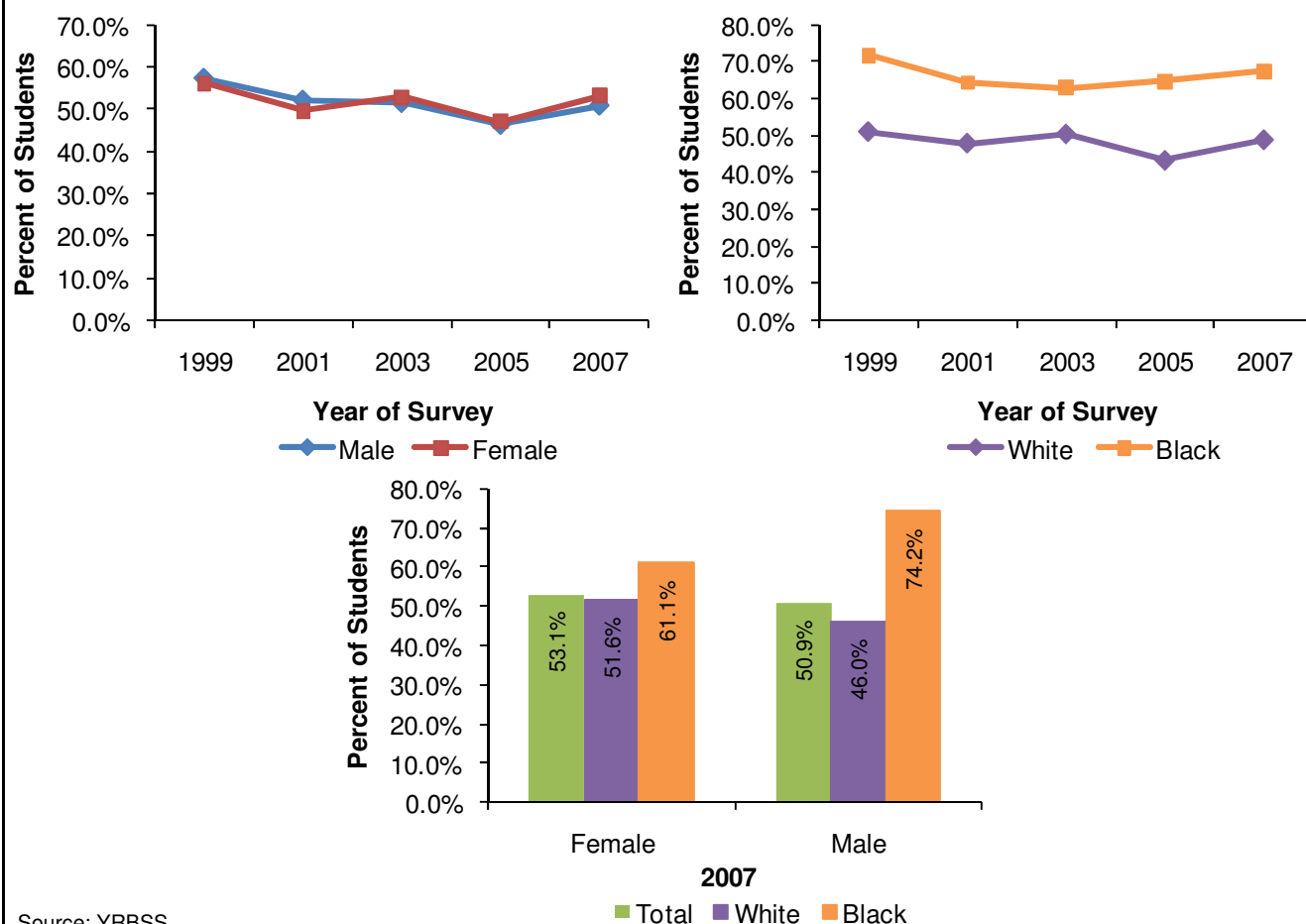
The percent of offenders living with HIV disease in Missouri correctional facilities overseen by the Department of Corrections has remained generally stable from 2006 to 2009 (Table 45). The prevalence of HIV disease was greatest among black males; in 2009, 2% of all black male offenders, including individuals of Hispanic origin, were living with HIV disease. The prevalence of HIV disease within Missouri Department of Corrections facilities tended to be slightly lower than national estimates among state prison inmates. Nationally, an estimated 2% of male state prison inmates and 2% of female state prison inmates were living with HIV disease in 2008.

Table 46. AIDS-related deaths among state prison inmates reported to the Deaths in Custody Reporting Program, 2007

Jurisdiction	All deaths	AIDS-related deaths	
		Number	Rate per 100,000 inmates
Missouri	78	2	7
Midwest*	589	18	7
U.S.	3,388	120	9

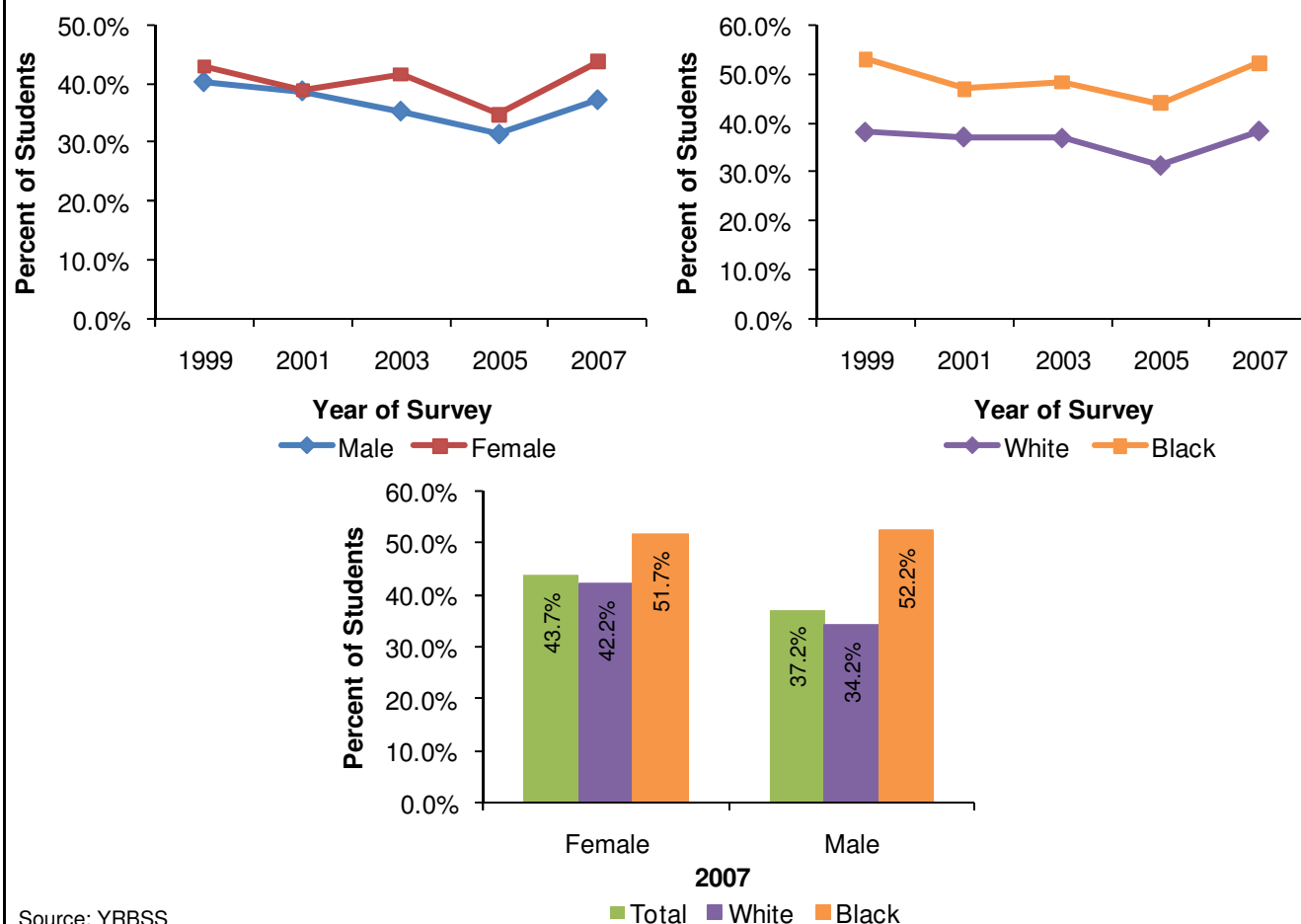
*Includes: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin
Source: Bureau of Justice Statistics

Nationwide there were 120 AIDS-related deaths among state prison inmates reported to the Deaths in Custody Reporting Program in 2007 (Table 46). This means for every 100,000 state prison inmates in the nation, 9 died due to AIDS-related causes in 2007. In Missouri and the Midwest, an estimated 7 out of every 100,000 state prison inmates died due to AIDS-related causes. For additional information regarding HIV disease in the correctional population refer to the Bureau of Justice Statistics reports on HIV in prisons and jails at <http://bjs.ojp.usdoj.gov/index.cfm?ty=pbse&sid=7>.

Figure 54. Percent of students who ever had sexual intercourse, by sex, by race/ethnicity, Missouri, 1999-2007

Data presented based on results from the YRBSS survey represent the estimated prevalence of a certain behavior in the high school population. These point estimates are subject to some uncertainty since they were derived from a probability sample of public and private school students, and not from the entire population of high school students. As a result, although the point estimates presented in the figures may appear to be different, refer to the text for details as to whether the observed point estimates are in fact different based on the comparison of statistical confidence intervals, or whether the observed point estimates only appear to be different due to uncertainty associated with the estimates.

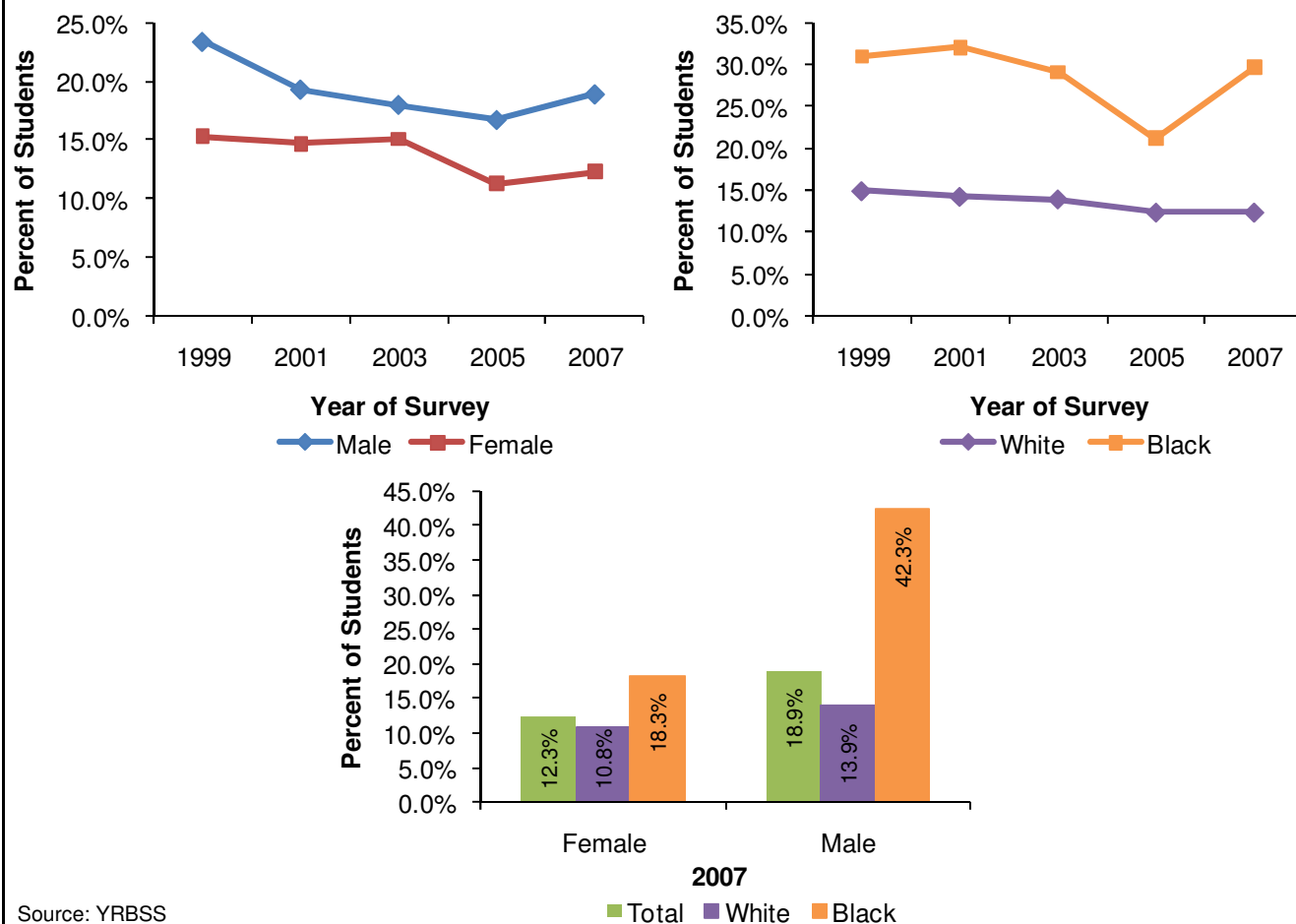
The percent of Missouri high school students who reported ever having sex in their lifetime remained generally steady between the survey periods of 1999 and 2007 (Figure 54). In 2007, 52% of all Missouri high school students reported ever having sex in their lifetime. There was not a difference in the percent of students reporting ever having sex between males or females. A greater percentage of black students reported ever having sex compared to whites in all study periods between 1999 and 2007. In 2007, there were not significant differences in the percent of students who reported ever having sex between white females compared to black females, or among white females compared to white males, or among black females compared to black males. A significantly lower percent of white males reported ever having sex compared to black males in 2007.

Figure 55. Percent of students who had sexual intercourse with at least one persons during the three months before the survey, by sex, by race/ethnicity, Missouri, 1999-2007

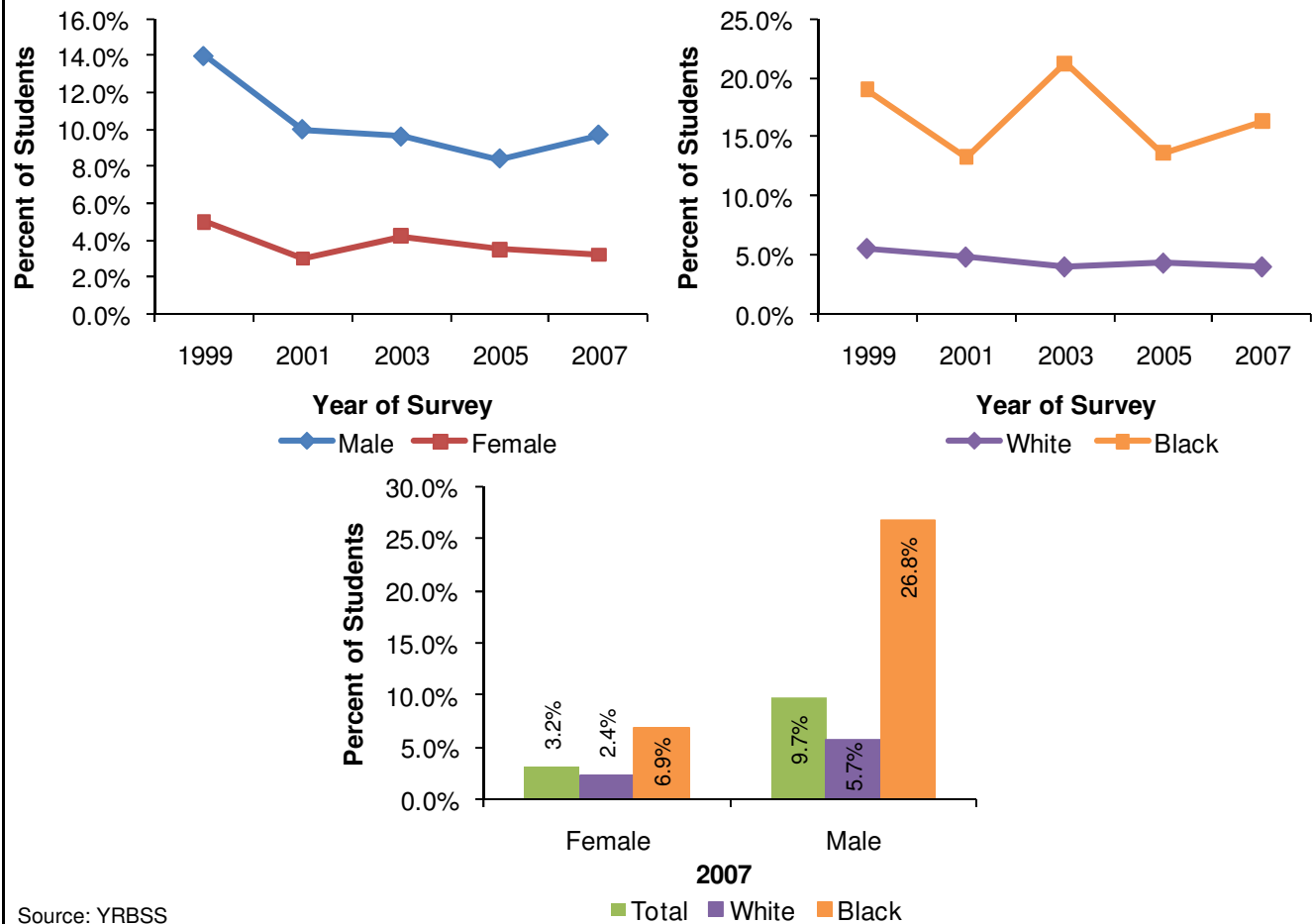
Source: YRBSS

The percent of Missouri high school students reporting sexual intercourse with at least one person within three months of the survey (i.e., recent sexual activity) remained generally steady between the 1999 and 2007 survey periods among both males and females (Figure 55). There were not significant differences in the percent of students reporting recent sexual activity between males and females over the survey periods from 1999 to 2007. The percent of black students reporting recent sexual activity tended to be higher than white students over the survey periods from 1999 to 2007, although the differences were not statistically significant in 2003 and 2007. In 2007, there were not significant differences in the percent of students reporting recent sexual activity by race or by sex.

Figure 56. Percent of students who had sexual intercourse with four or more persons during their life, by sex, by race/ethnicity, Missouri, 1999-2007

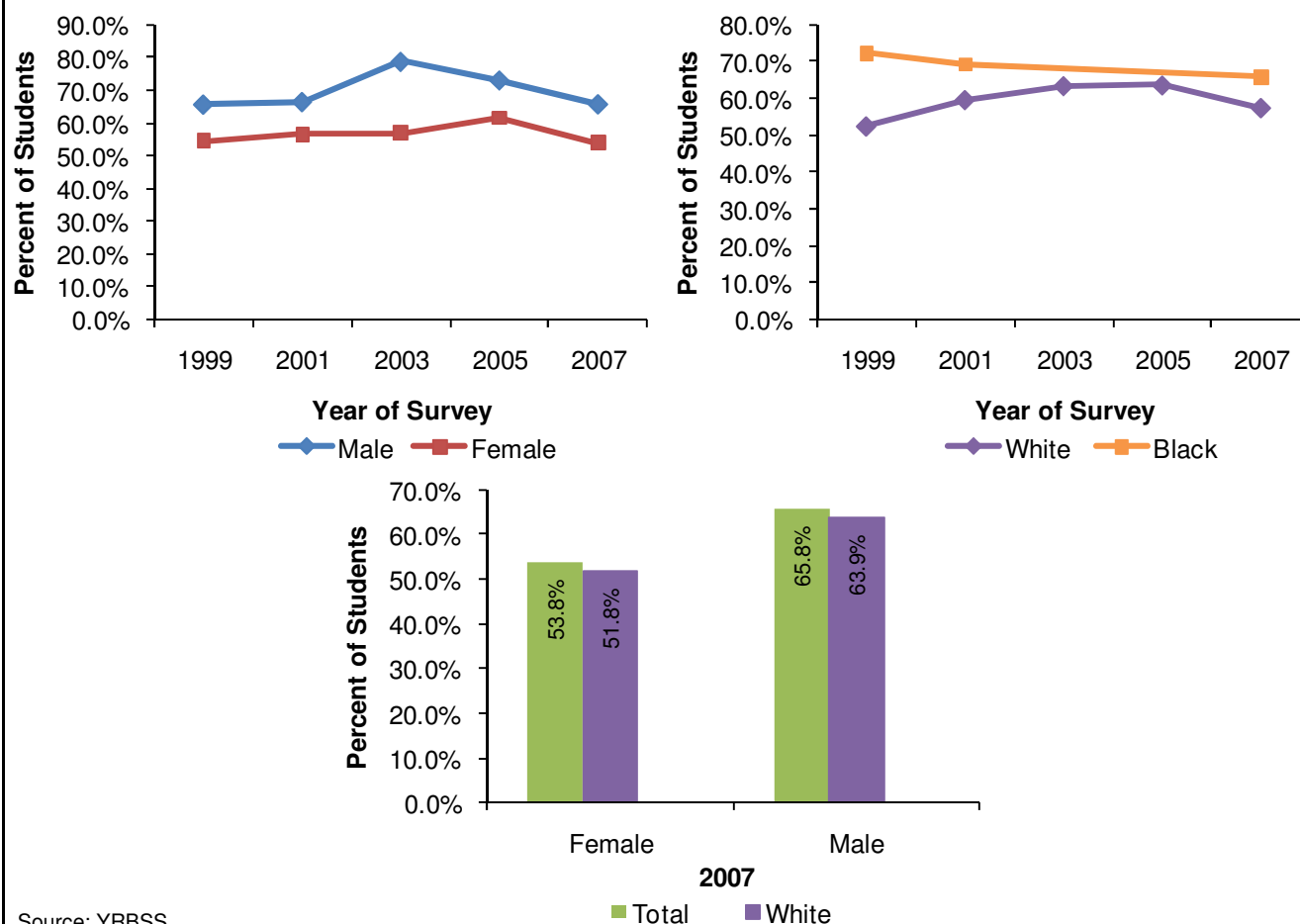


The percent of Missouri high school students reporting four or more sexual partners during their life remained generally steady among both males and females over the survey periods from 1999 to 2007 (Figure 56). Although the point estimate of the percent of students reporting four or more sexual partners tended to be higher for males than females in all survey periods from 1999 to 2007, the differences were not statistically significant. A greater percentage of blacks reported four or more lifetime sexual partners compared to whites in each survey year from 1999 to 2007. The decrease in the point estimate of the percentage of blacks reporting four or more sexual partners during the 2005 survey should be interpreted with caution as the lower estimate may solely be due to chance alone. In 2007, there were not differences in the percent of student reporting four or more lifetime sexual partner between white females and white males, or between black females and black males, or between white females and black females. A significantly greater percentage of black males reported four or more lifetime sexual partners compared to white males.

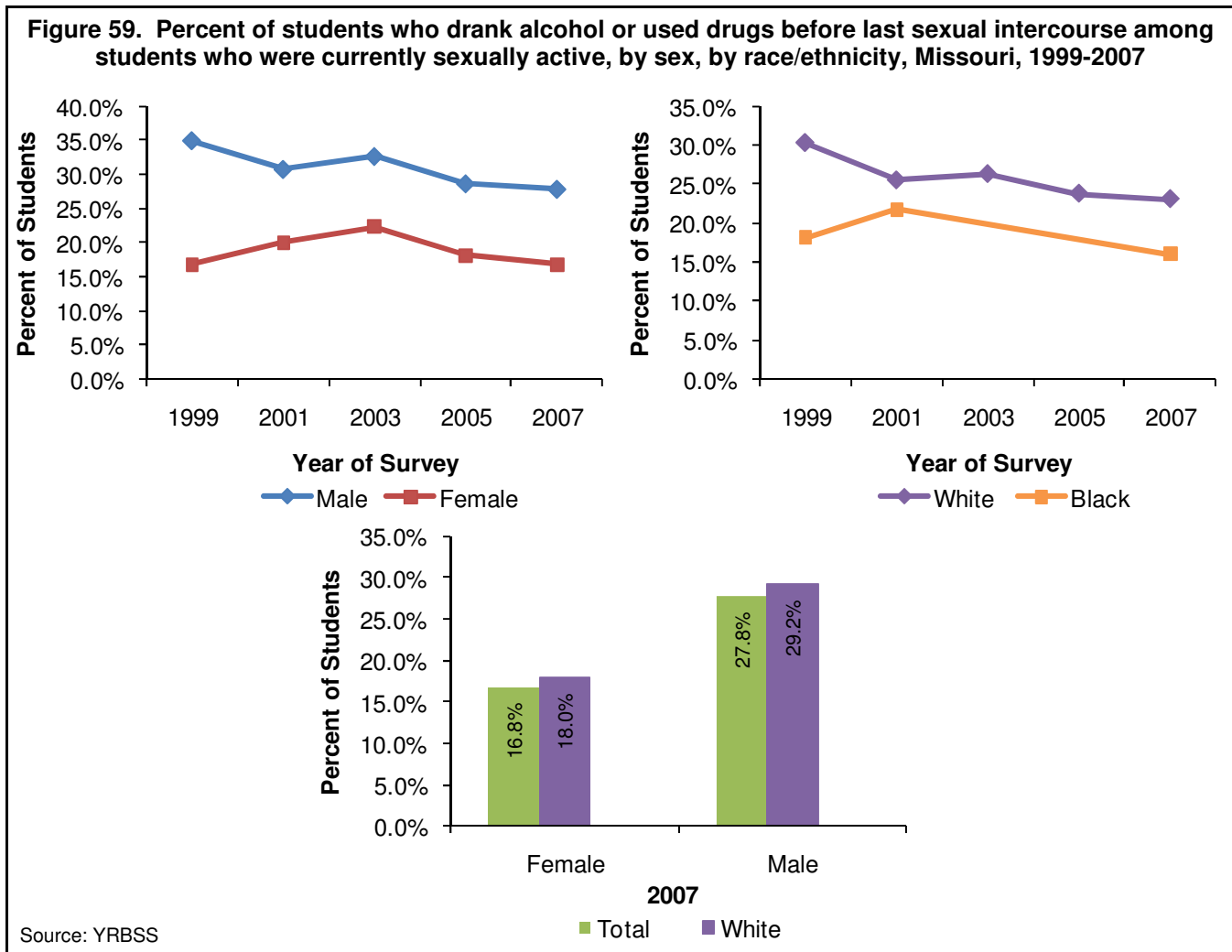
Figure 57. Percent of students who had sexual intercourse before age 13 years, by sex, by race/ethnicity, Missouri, 1999-2007

The percent of Missouri high school students who had sexual intercourse before 13 years of age was generally steady over the surveys conducted between 1999 and 2007 (Figure 57). A greater percentage of males tended to reported first having sex before 13 years of age compared to all females, although the difference was not significant in the 2005 survey. A significantly greater percentage of blacks reported first having sex before 13 years of age compared to whites in all survey years between 1999 and 2007. The fluctuation in the percent of blacks reporting first having sex before 13 years of age over the survey years of 1999 to 2007 should be interpreted with caution, as the differences may solely be due to chance alone. In 2007, a significantly greater percentage of black males reported first having sex before 13 years of age compared to black females and compared to white males. There were no differences in the percent of students first having sex before 13 years of age between white females and black females, and between white females and white males.

Figure 58. Percent of students who reported either they or their partner used a condom during last sexual intercourse among students who were currently sexually active, by sex, by race/ethnicity, Missouri, 1999-2007



Among Missouri high school students who were currently sexually active at the time of the survey, the percent that reported using a condom during their most recent sexual intercourse remained generally stable over the surveys from 1999 to 2007 (Figure 58). Although the estimated percent of sexually active students that used a condom tended to be higher for males compared to females, the differences were generally not significant in each of the survey years from 1999 to 2007. Due to the small sample size of black high school students who were currently sexually active, estimates of condom use among black students were not produced for the surveys in 2003 and 2005. In the remaining survey years, there were not significant differences in condom use at last sexual intercourse between whites and blacks. Overall in 2007, 59% of currently sexually active high school students used a condom during their last sexual intercourse. Estimates of condom use among black males and females in 2007 were not available due to small sample sizes. Although the estimate of the percent of currently active total males and white males using a condom at last sexual intercourse tended to be greater than the percent among total females and white females, respectively, the differences were not significant.



The percent of currently sexually active Missouri high school students who drank alcohol or used drugs before their last sexual intercourse remained generally stable over the survey periods from 1999 to 2007 (Figure 59). A greater percentage of sexually active males tended to report substance use prior to sexual intercourse compared to females, although the differences were not significant in 2003 or 2007. Due to the small sample size of black high school students who were currently sexually active, estimates of alcohol and drug use before last sexual intercourse among black students were not produced for the surveys in 2003 and 2005. In 1999, a significantly greater percentage of whites used alcohol or drugs before sexual intercourse compared to blacks. However, in the other survey years where estimates were available for both whites and blacks, the differences were not significant between whites and blacks. Overall in 2007, 22% of currently sexually active Missouri high school students used alcohol or drugs prior to their last sexual intercourse. Estimates of alcohol and drug use before last sexual intercourse were not available for black males or females in 2007 due to the small sample size. Although the estimate of the percent of currently sexually active total males and white males who used alcohol or drugs before their last sexual intercourse tended to be greater than the percent among total females and white females, respectively, the differences were not significant.

Table 47. Percent of schools with policy and curriculum regarding HIV, STD, and pregnancy prevention, Missouri and 47 U.S. states, 2007-2008 school year

Grades Levels	Topic taught in a required course	% Missouri Schools	Median % among Schools in 47 States
6, 7, or 8	The differences between HIV and AIDS	82.8	82.8
	How HIV and other STDs are transmitted	85.0	84.8
	How HIV and other STDs are diagnosed and treated	79.9	77.2
	The health consequences of HIV, other STDs , and pregnancy	83.2	82.8
	Compassion for persons living with HIV or AIDS	64.4	63.6
	<i>The benefits of being sexually abstinent</i>	<i>81.1</i>	<i>81.6</i>
	<i>How to prevent HIV, other STDs and pregnancy</i>	<i>79.5</i>	<i>82.9</i>
	<i>How to access valid and reliable information, products, and services related to HIV, other STDs, and pregnancy</i>	<i>71.5</i>	<i>69.0</i>
	<i>The influences of media, family, and social and cultural norms on sexual behavior</i>	<i>76.4</i>	<i>75.4</i>
	<i>Communication and negotiation skills related to eliminating or reducing risk for HIV, other STDs, and pregnancy</i>	<i>73.2</i>	<i>72.7</i>
	<i>Goal-setting and decision-making skills related to eliminating or reducing risk for HIV, other STDs, and pregnancy</i>	<i>75.0</i>	<i>74.8</i>
	All 11 HIV, STD, and pregnancy prevention topics	56.6	51.8
9, 10, 11, or 12	The relationship among HIV, other STDs and pregnancy	94.1	94.1
	The relationship between alcohol and other drug use and risk for HIV, other STDs, and pregnancy	92.8	94.8
	Efficacy of condoms	71.8	81.4
	Importance of using condoms consistently and correctly	61.3	72.9
	How to obtain condoms	47.5	62.9
	<i>The benefits of being sexually abstinent</i>	<i>94.0</i>	<i>94.8</i>
	<i>How to prevent HIV, other STDs, and pregnancy</i>	<i>94.8</i>	<i>94.8</i>
	<i>How to access valid and reliable health information, products, and services related to HIV, other STDs, and pregnancy</i>	<i>87.4</i>	<i>90.6</i>
	<i>The influences of media, family, and social and cultural norms on sexual behavior</i>	<i>91.0</i>	<i>91.2</i>
	<i>Communication and negotiation skills related to eliminating or reducing risk for HIV, other STDs, and pregnancy</i>	<i>91.8</i>	<i>90.3</i>
	<i>Goal-setting and decision-making skills related to eliminating or reducing risk for HIV, other STDs, and pregnancy</i>	<i>88.3</i>	<i>90.9</i>
	All 11 HIV, STD, and pregnancy prevention topics	40.6	57.0

Topics in bold italics represent the topics that were assessed in both grade level divisions
Source: School Health Profiles

Among sixth, seventh, and eighth graders, a slightly greater percentage of schools in Missouri covered all eleven HIV, STD, and pregnancy prevention topics (57%) compared to the median estimates for schools in all 47 states surveyed (52%) (Table 47). When assessing individual topics taught in sixth, seventh, and eighth grades, the percent of schools teaching the topics in Missouri was similar to the median percent of all 47 states surveyed.

The percent of Missouri schools teaching all eleven HIV, STD, and pregnancy prevention topics to ninth, tenth, eleventh, and twelfth graders was lower (41%) than the median percent among all 47 states surveyed (57%). Among the topics assessed at the high school level, teaching topics related to condom use, availability, and efficacy tended to be lower among Missouri schools compared to the survey median. The percent of Missouri schools teaching the other individual health topics at the high school level tended to be similar to the median percent of all 47 states surveyed.

Of topics reviewed in both grade level divisions (i.e. sixth, seventh, or eighth grade versus ninth, tenth, eleventh, or twelfth grade), a greater percent of Missouri schools addressed each of the topics at the higher grade levels compared to the lower grade levels.

Table 48. Substance abuse treatment admissions by primary substance of abuse, by sex, by age at admission, by race, and by ethnicity, Missouri, 2008

PRIMARY SUBSTANCE																			
		Total		Alcohol only	Alcohol with secondary drug	Cocaine (smoked)	Cocaine (other route)	Marijuana	Heroin	Other opiates	PCP	Hallucinogens	Amphetamines	Other stimulants	Tranquilizers	Sedatives	Inhalants	Other/ Unknown	
		No.	%																
Sex	Total	48,597	100.0	22.1	17.3	8,384	5,101	1,057	12,560	2,991	2,031	249	46	4,491	13	409	55	64	414
	%																		
Male		69.7	78.3	76.5	58.6	67.9	74.8	55.7	48.6	75.1	76.1	57.9	46.2	37.4	32.7	60.9	62.3		
	%																		
Female		30.3	21.7	23.5	41.4	32.1	25.2	44.3	51.4	24.9	23.9	42.1	53.8	62.6	67.3	39.1	37.7		
	%																		
Total		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Age at Admission		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	%																		
0-11 years		6.1	1.1	3.3	0.3	2.3	18.2	1.2	3.0	0.4	23.9	1.5	38.5	7.3	5.5	40.6	4.3		
	%																		
12-17 years		5.9	2.9	5.0	1.2	4.1	11.3	6.1	6.4	5.2	15.2	5.2	0	7.3	5.5	6.3	5.8		
	%																		
18-20 years		16.6	9.8	15.7	5.8	16.2	24.6	22.9	23.0	22.9	34.8	16.8	0	19.1	10.9	3.1	17.6		
	%																		
21-25 years		16.4	11.9	15.3	8.8	18.6	17.7	27.1	24.2	27.7	19.6	22.2	15.4	21.5	18.2	18.8	16.7		
	%																		
26-30 years		11.8	10.2	11.5	11.4	12.3	10.2	14.9	14.4	19.3	0	17.8	15.4	11.5	12.7	7.8	11.6		
	%																		
31-35 years		11.8	13.4	12.8	17.6	13.2	6.9	9.7	9.9	14.5	4.3	15.6	0	9.3	29.1	7.8	9.7		
	%																		
36-40 years		12.6	17.3	15.2	23.6	13.5	5.4	6.9	6.9	5.6	0	11.8	7.7	9.5	5.5	12.5	12.3		
	%																		
41-45 years		10.6	16.5	13.0	19.8	13.3	3.6	4.8	6.7	3.2	2.2	6.2	23.1	9.3	9.1	1.6	13.0		
	%																		
46-50 years		5.2	9.6	5.9	7.7	4.7	1.5	4.1	3.4	0.8	0	2.4	0	4.2	1.8	1.6	7.5		
	%																		
51-55 years		1.9	4.6	1.8	2.6	1.3	0.3	1.8	1.5	0.4	0	0.4	0	0.5	0	0	1.0		
	%																		
56-60 years		0.7	1.9	0.5	0.9	0.3	0.1	0.3	0.4	0	0	0.1	0	0	1.8	0	0.5		
	%																		
61-65 years		0.2	0.8	0.1	0.1	0.1	0	0.2	0	0	0	0	0	0	0.5	0	0		
	%																		
66 years and over		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
	%																		
Total		71.4	84.6	76.8	32.2	57.1	65.4	58.3	92.1	5.6	71.7	95.4	92.3	95.4	96.4	95.3	57.2		
Race		25.1	11.5	19.7	65.0	37.1	30.6	38.7	4.9	94.0	19.6	1.8	0	2.9	3.6	3.1	39.9		
White		0.3	0.4	0.4	0.4	0.1	0.1	0.1	0	0.2	0	0	0	0	0	0	0	0.2	
Black																			
American Indian or Alaskan Native																			
Asian or Native Hawaiian or Other Pacific Islander		0.1	0.2	0.1	0.2	0.3	0.1	0.1	0.1	0	2.2	0.1	0	0.5	0	0	0	0	
Other		1.2	1.6	0.9	0.6	2.6	1.4	0.8	0.8	0	0	0.8	0	0.2	0	1.6	1.2		
Unknown		2.0	1.7	2.0	1.6	2.8	2.3	2.0	1.8	0.4	6.5	1.8	7.7	0.7	0	0	1.4		
Total		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Ethnicity																			
Hispanic		1.9	2.4	1.6	1.2	3.4	1.9	1.2	1.8	0.8	2.2	2.0	7.7	0.5	0	0	1.7		
Not Hispanic		98.1	97.6	98.4	98.8	96.6	98.1	98.8	98.2	99.2	97.8	98.0	92.3	99.5	100.0	100.0	98.3		
Total		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Source: TEDS																			

Source: TEDS

In 2008, 48,597 admissions to substance abuse treatment centers in Missouri receiving public funding were recorded (Table 48). The most common primary substance of abuse among treatment center admissions was marijuana (26%); alcohol use only was the second most common primary substance of abuse (22%). The majority of the total admissions were among males (70%). Females represented a greater proportion of admissions compared to males among persons admitted with a primary substance of abuse of other opiates, other stimulants, tranquilizers, or sedatives. Although persons 21 to 25 years of age comprised 17% of the total admissions, this age group comprised 35% of the admissions where hallucinogens were the primary substance of abuse. Although persons 21 to 25 and persons 26 to 30 years of age comprised 17% and 16% of the total admissions, these age groups represented 23% and 27% of the admissions where heroin was the primary substance of abuse, respectively. Persons 36 to 50 years of age disproportionately represented treatment admissions related to smoked cocaine use. Whites represented the majority of total treatment admissions (71%). However, blacks, of any ethnicity, represented the majority of treatment admissions among persons admitted for smoked cocaine use and PCP use.

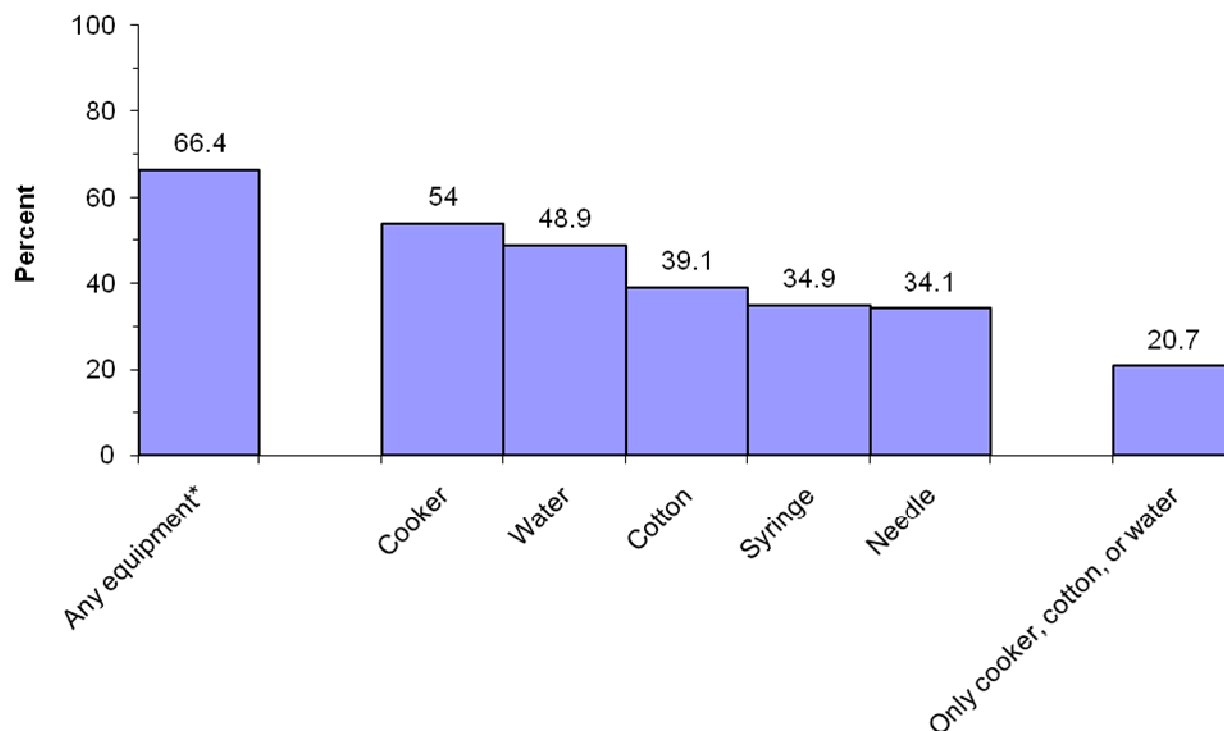
Table 49. Select services provided by substance abuse treatment facilities, Missouri, 2008		
	N	%
Total Facilities	257	--
Methadone Therapy	13	5.1
HIV testing	47	18.3
TB screening	34	13.2
Hepatitis B screening	74	28.8
Hepatitis C screening	39	15.2
STD testing	44	17.1
HIV/AIDS education, counseling, or support	118	45.9
Early intervention for HIV	30	11.7
Program specifically for persons living with HIV/AIDS	6	2.3
Source: SAMSHA, National Survey of Substance Abuse Treatment Services		

There were 257 substance abuse treatment facilities in Missouri that responded to the National Survey of Substance Abuse Treatment Services (N-SSATS) in 2008 (Table 49). Of responding facilities, only 13% offered TB screening; 15% offered Hepatitis C screening; 17% offered STD testing; 18% offered HIV testing; and 29% offered Hepatitis B screening. Although testing for HIV was not common among the facilities (18%), 46% of facilities offered HIV/AIDS education, counseling or support. However, only 2% of facilities had a program designed specifically for persons living with HIV/AIDS. Given the strong body of evidence linking substance abuse with risky sexual behaviors, more widespread screening of STDs, Hepatitis B and C, and HIV may be an important recommendation to substance abuse treatment facilities.

Table 50. Select drug and alcohol use, by age, Missouri, 2006-2007

Measure	12-17		Age 18-25		26+	
	N	%*	N	%*	N	%*
Illicit Drugs						
Past Month Illicit Drug Use ¹	47	9.5	119	18.8	220	5.9
Past Year Marijuana Use	61	12.4	157	24.7	263	7.1
Past Month Marijuana Use	32	6.4	90	14.2	145	3.9
Past Month Use of Illicit Drugs Other Than Marijuana ¹	26	5.2	62	9.7	113	3.1
Past Year Cocaine Use	8	1.6	38	6.0	60	1.6
Past Year Nonmedical Pain Reliever Use	36	7.3	79	12.5	129	3.5
Alcohol						
Past Month Alcohol Use	80	16.3	402	63.4	1,949	52.7
Past Month Binge Alcohol Use ²	51	10.3	282	44.6	839	22.7
Perception of Great Risk of Drinking Five or More Drinks Once or Twice a Week	175	35.5	170	26.9	1,559	42.1
Past Year Dependence, Abuse and Treatment						
Illicit Drug Dependence ¹	12	2.5	31	4.8	42	1.1
Illicit Drug Dependence or Abuse ¹	22	4.4	50	7.9	63	1.7
Alcohol Dependence	11	2.1	48	7.6	112	3.0
Alcohol Dependence or Abuse	29	5.8	122	19.2	237	6.4
Alcohol or Illicit Drug Dependence or Abuse ¹	40	8.2	146	23.1	277	7.5
Needing But Not Receiving Treatment for Illicit Drug Use ^{1,3}	20	4.0	47	7.4	56	1.5
Needing But Not Receiving Treatment for Alcohol Use ⁴	27	5.5	114	18.0	225	6.1
Serious Psychological Distress ⁵	--	--	121	19.1	443	12.0
Having at least one major depressive episode ⁶	45	9.1	61	9.7	310	8.4
<p>*Percent of population within the age group with the measure of interest</p> <p>¹ Includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics not used for medical reasons.</p> <p>² Drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days.</p> <p>³ Respondents classified as needing treatment for illicit drugs, but not receiving treatment for an illicit drug problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers).</p> <p>⁴ Respondents classified as needing treatment for alcohol, but not receiving treatment for an alcohol problem at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers).</p> <p>⁵ Serious psychological distress (SPD) is defined as having a score of 13 or higher on the K6 scale.</p> <p>⁶ Defined as in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms.</p> <p>Source: SAMHSA, National Survey on Drug Use and Health</p>						

A greater proportion of the population 18 to 25 years of age reported various illicit drug use and alcohol use compared to persons 12 to 17 years of age and persons 26 years of age or older (Table 50). Past year dependence and abuse of illicit drugs and alcohol was also greater among persons 18 to 25 years of age compared to the other age groups. The percent of persons 12 to 17 years of age using various illicit drugs tended to be higher than the percent among persons 26 years of age or older. These findings suggest that prevention efforts regarding the relationship between substance use and risky sexual behaviors should target persons 18 to 25 years of age. The greatest numbers of new HIV diagnoses in recent years have been among persons in this age range.

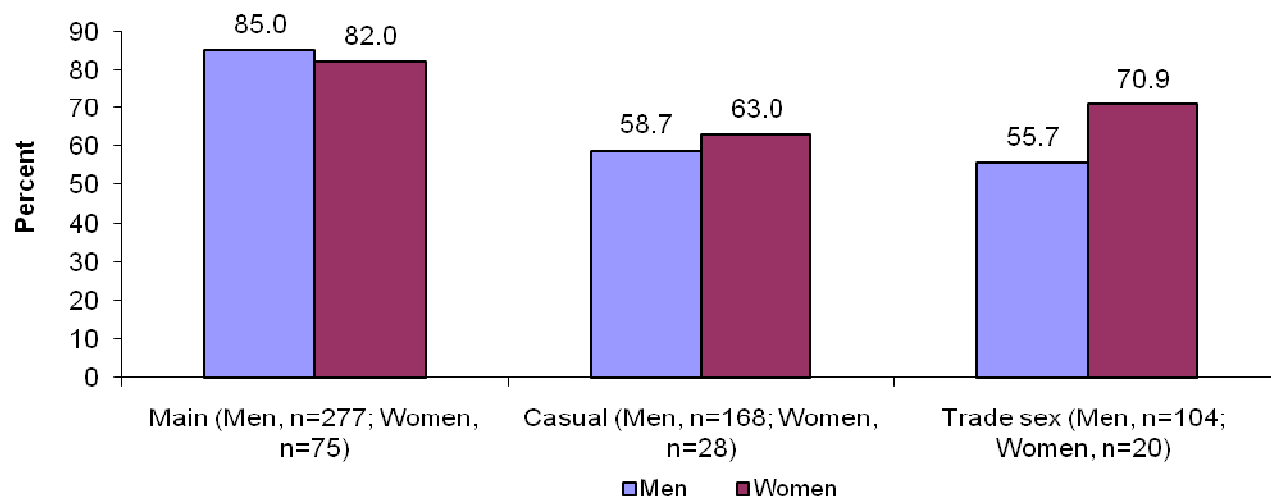
Figure 60. Percent of injection drug users sharing injection equipment in the past year, St. Louis MSA, 2005

Source: NHBS, IDU Cycle, 2005
 Analysis by Dr. Mei Lin, MDHSS, Division of Community and Public Health

In 2005, 515 IDU from the St. Louis MSA, selected using respondent driven sampling, completed a survey regarding HIV-related risk behaviors, HIV testing, and access to HIV prevention services. The results from the survey can be applied to IDU in the St. Louis MSA. However, these data are not able to be generalized to IDU in the state of Missouri overall.

Among survey participants, 71% were male, 94% were black, and 36% were 50 years of age or more. An estimated 68% of IDU first began injecting drugs before the age of 25. The most commonly injected drug was heroin, with 98% of survey participants reporting injecting heroin in the past year. Daily injection drug use was common, with 75% of participants reporting injecting drugs at least once a day. Most IDU (81%) reported using non-injection drugs, that were not medically prescribed, in the past year in addition to injection drugs. Marijuana was the most commonly reported non-injection drug used (65%).

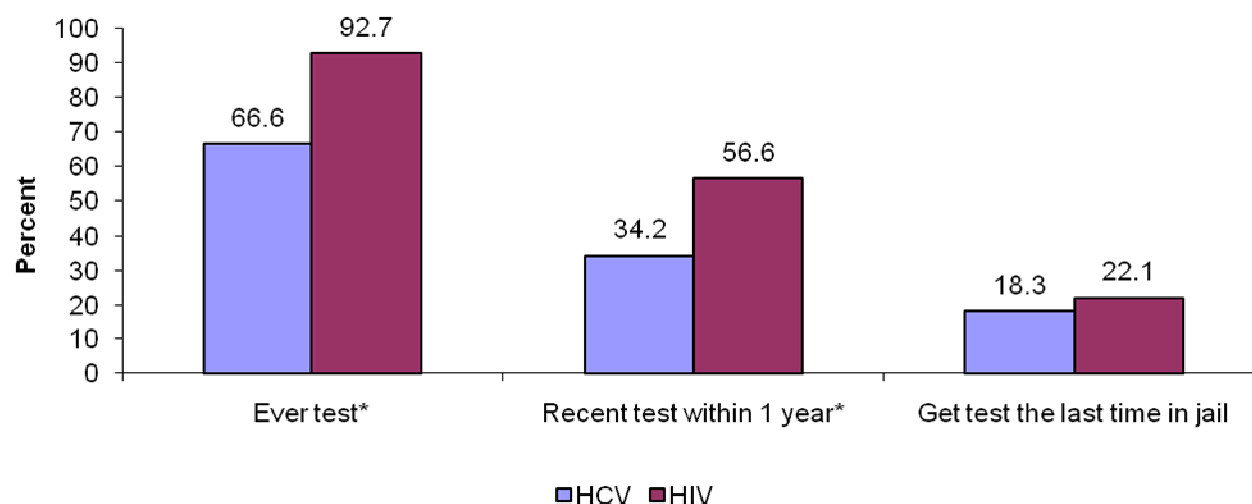
Among IDU, 66% reported sharing any type of injection equipment in the past year (Figure 60). The cooker was the most frequently reported piece of injection equipment that was shared in the past year. An estimated 34% of IDU reported sharing a needle in the past year.

Figure 61. Percent of injection drug users reporting unprotected sex at last heterosexual sexual activity, by partner type, St. Louis MSA, 2005

Source: NHBS, IDU Cycle, 2005

Analysis by Dr. Mei Lin, MDHSS, Division of Community and Public Health

Among survey participants, 94% considered themselves to be heterosexual, 5% considered themselves to be bisexual, and less than one percent considered themselves to be homosexual. The percent of IDU that reported unprotected sex at last heterosexual sexual activity varied by partner type (Figure 61). Unprotected sex was most frequently reported at last sexual activity with a main partner (85% males, 82% females). However, even at last sexual activity with a casual partner or when trading sex for money, drugs, or other gifts, the majority reported having unprotected sex. Females tended to be slightly more likely to report unprotected sex compared to males, both among casual partners and when exchanging sex for money, drugs, or other gifts. These findings highlight the need for continued education among IDU regarding the importance of safer sexual practices to prevent disease transmission.

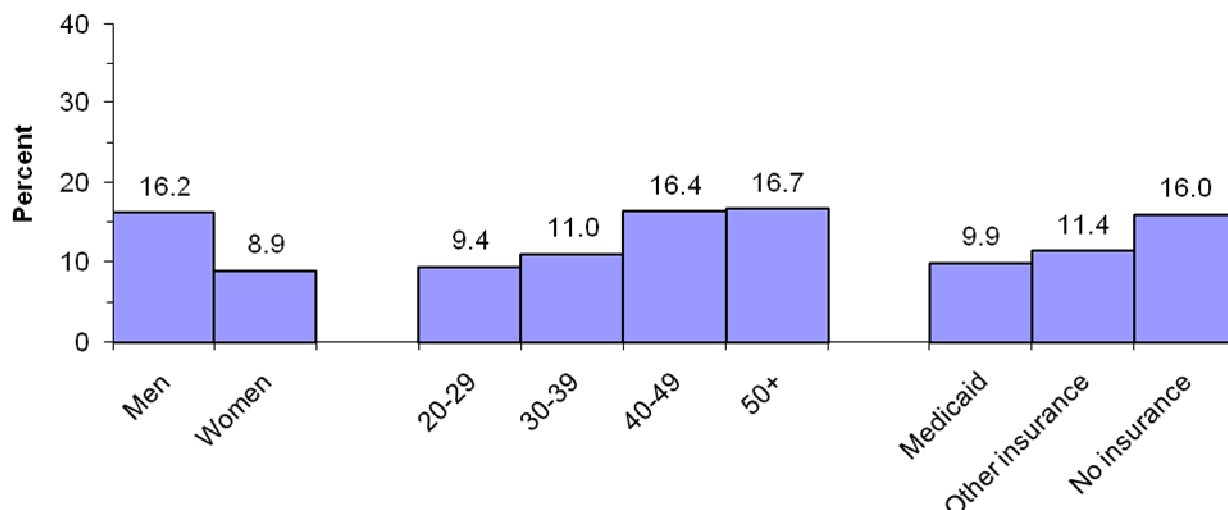
Figure 62. Percent of injection drug users tested for HIV and Hepatitis C (HCV), St. Louis MSA, 2005

Source: NHBS, IDU Cycle, 2005

Analysis by Dr. Mei Lin, MDHSS, Division of Community and Public Health

Most IDU have been tested for HIV at least once in their lifetime (93%), and over half (57%) have been tested in the past year (Figure 62). The percent of IDU ever tested for hepatitis C and tested within the past year was lower than the percent of IDU tested for HIV. Over half (67%) of IDU had ever been tested for hepatitis C, and 34% had been tested in the past year. Of IDU that had been incarcerated, 22% reported receiving an HIV test the last time they were incarcerated, and 18% reported receiving a test for hepatitis C.

Figure 63. Percent of injection drug users who attended HIV prevention activities in the past year, by sex, by age, by health insurance, St. Louis MSA, 2005



Source: NHBS, IDU Cycle, 2005

Analysis by Dr. Mei Lin, MDHSS, Division of Community and Public Health

Only 14% of IDU participated in an individual or group level HIV prevention activity in the past year. The likelihood of participation varied slightly by sex, age, and health insurance coverage type (Figure 63). Males were more likely to have participated in an HIV prevention activity in the past year (16%) compared to females (9%). Participation tended to be higher among persons 40 years of age or older compared to younger individuals. Participation in an HIV prevention activity was slightly higher among IDU with no health insurance (16%) compared to those with Medicaid (10%) and IDU with another type of health insurance (11%). Awareness of many local organizations offering HIV prevention activities was low. Although nearly all IDU reported having heard that HIV prevention services could be obtained from the Red Cross (98%), only 22%, 20%, and 17% of IDU had heard of HIV prevention services at Reach St. Louis, St. Louis Effort for AIDS, and Project Ark, respectively. This finding suggests that additional efforts to promote HIV prevention organizations to IDU in the St. Louis area may be warranted.

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Key Highlights: What are the HIV service utilization patterns of individuals with HIV disease in Missouri?

Magnitude of the Problem

- There were 5,501 Missourians enrolled in HIV medical case management, and 3,359 Missourians enrolled in ADAP in 2009.
- HIV medical case management was the Ryan White funded service utilized by the largest number of clients in the state; mean service utilization was also greatest for HIV medical case management.
- Among Missourians whose primary reason for hospitalization in 2007 was related to HIV, 65% of the hospitalizations were paid for by Medicare or Medicaid.
- Among persons recently diagnosed with HIV, 77% entered medical care, as measured by the receipt of a CD4 lymphocyte or viral load laboratory result at MDHSS, within one year of diagnosis, and 90% had entered medical care within four years of diagnosis.

Where

- The mean number of HIV medical case management visits in 2009 was greatest in the St. Louis HIV region; on average persons in the St. Louis HIV region utilized case management 16 times in 2009.
- The mean number of primary care visits in 2009 among clients utilizing Ryan White funds was greatest in the Southwest HIV region; on average persons in the Southwest HIV region received primary medical care over six times in 2009.
- Persons recently diagnosed with HIV in the St. Louis HIV region were less likely to enter medical care, as measured by the receipt of a CD4 lymphocyte or viral load laboratory result at MDHSS, within four years of their diagnosis compared to persons diagnosed with HIV in other HIV regions.

Who

Sex

- A greater proportion of persons enrolled in case management and ADAP were females compared to the proportion among persons living with HIV disease.
- Among persons hospitalized in 2007 related to HIV, the average number of days of hospitalization per discharge and the average charges per day hospitalized were greater for females than males.
- Females recently diagnosed with HIV disease were more likely to enter medical care, as measured by the receipt of a CD4 lymphocyte or viral load laboratory result at MDHSS, within 12 months of diagnosis compared to males.

Race/Ethnicity

- Minorities represented a greater proportion of persons enrolled in case management and ADAP in 2009 compared to the proportion of minorities among persons living with HIV disease in Missouri.
- Blacks represented a greater proportion of clients utilizing Ryan White funded transportation services compared to the proportion they represented among other service categories.
- Hispanics tended to have a greater mean number of primary medical care visits than persons of another race/ethnicity.
- Blacks recently diagnosed with HIV disease were less likely to enter medical care, as measured by the receipt of a CD4 lymphocyte or viral load laboratory result at MDHSS, within four years compared to whites and Hispanics.

Age

- Persons 25-44 years of age represented a greater proportion of persons enrolled in case management and ADAP in 2009 compared to the proportion of persons 25-44 years old living with HIV disease in Missouri.
- Among individuals recently diagnosed, as the age at the time of diagnosis increased, the probability of entering medical care within four years of diagnosis also increased.

Exposure Category

- MSM and persons with no indicated risk recently diagnosed with HIV disease were less likely to enter medical care, as measured by the receipt of a CD4 lymphocyte or viral load laboratory result at MDHSS, within four years compared to adults with other known risk factors.

Table 51. Demographic characteristics of persons enrolled in HIV medical case management, persons enrolled in ADAP, and persons living with HIV disease, Missouri, 2009

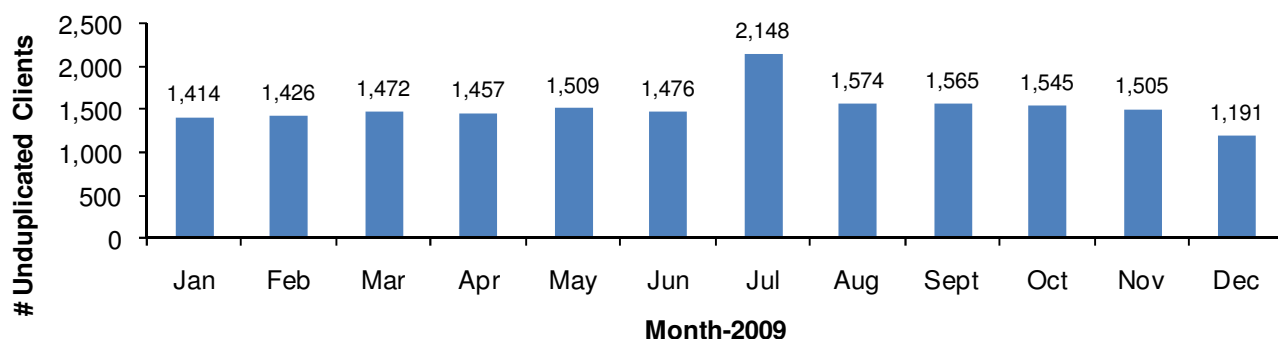
	<u>Enrolled in Case Management</u>		<u>Enrolled in ADAP*</u>		<u>Living HIV Disease</u>	
	N	%	N	%	N	%
Current Gender						
Male	4,323	78.6%	2,696	80.3%	9,253	83.2%
Female	1,130	20.5%	634	18.9%	1,843	16.6%
Transgender	47	0.9%	28	0.8%	26	0.2%
Unknown	1	<0.1%	1	<0.1%	0	0.0%
Total	5,501	100.0%	3,359	100.0%	11,122	100.0%
Race/Ethnicity						
White	2,654	48.2%	1,536	45.7%	5,686	51.1%
Black	2,540	46.2%	1,586	47.2%	4,889	44.0%
Hispanic	238	4.3%	193	5.7%	402	3.6%
Asian/Pacific Islander	22	0.4%	19	0.6%	50	0.4%
American Indian/Alaskan Native	30	0.5%	15	0.4%	19	0.2%
Two or More Races/Unknown	17	0.3%	10	0.3%	76	0.7%
Total	5,501	100.0%	3,359	100.0%	11,122	100.0%
Current Age[‡]						
<13	25	0.5%	4	0.1%	35	0.3%
13-18	42	0.8%	10	0.3%	60	0.5%
19-24	301	5.5%	230	6.8%	447	4.0%
25-44	2,633	47.9%	1,838	54.7%	4,931	44.3%
45-64	2,381	43.3%	1,228	36.6%	5,246	47.2%
65+	117	2.1%	48	1.4%	403	3.6%
Unknown	2	<0.1%	1	<0.1%	0	0.0%
Total	5,501	100.0%	3,359	100.0%	11,122	100.0%

*ADAP=AIDS Drug Assistance Program

‡As of December 31, 2009

Source: FACTORS and eHARS

There were slight variations in the distributions of case management enrollment, ADAP enrollment, and persons living with HIV disease by current gender (Table 51). Differences in demographic information may exist because data regarding persons living with HIV disease were obtained from a different source (eHARS) than information on persons enrolled in case management or ADAP (FACTORS). Females represented a slightly greater proportion of persons enrolled in case management and ADAP compared to persons living with HIV disease. Minorities tended to represent a slightly greater proportion of persons enrolled in case management and ADAP compared to persons living with HIV disease. Persons 25-44 years of age represented a greater proportion of persons enrolled in case management and ADAP compared to persons living with HIV disease.

Figure 64. ADAP utilization, Missouri, 2009

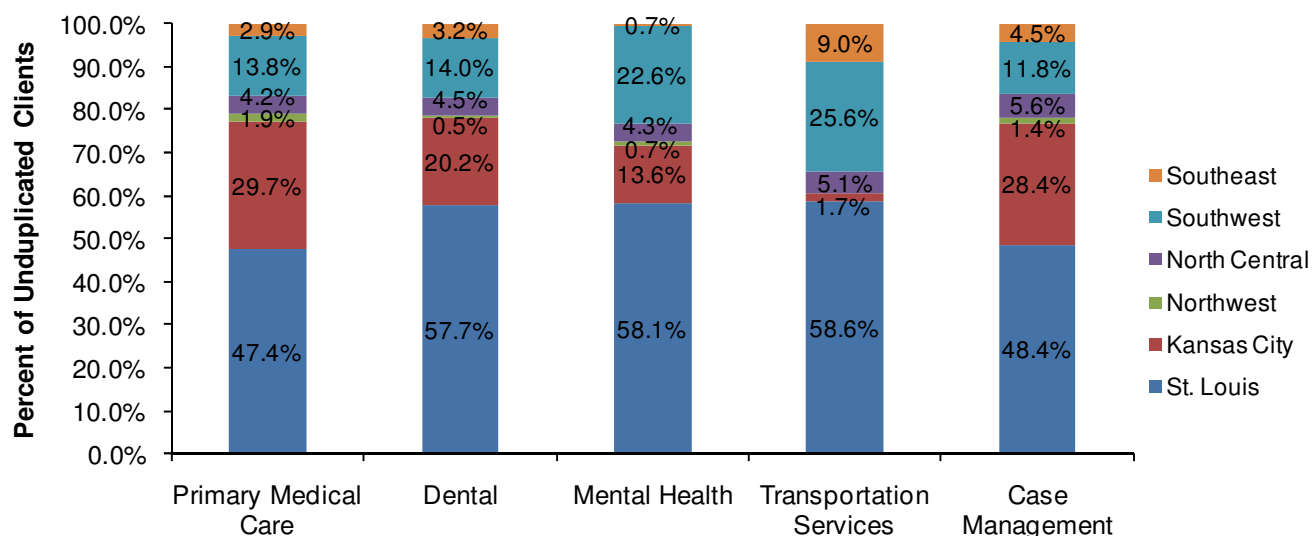
Source: FACTORS

Utilization of ADAP services in 2009 remained generally steady from January through June, and from August through November (Figure 64). Utilization of ADAP services increased markedly in July, and was lower in December compared to all other months.

Table 52. Number of unduplicated Missouri clients receiving services through Ryan White funding and the mean number of times the service was utilized, by HIV region, by race/ethnicity, 2009

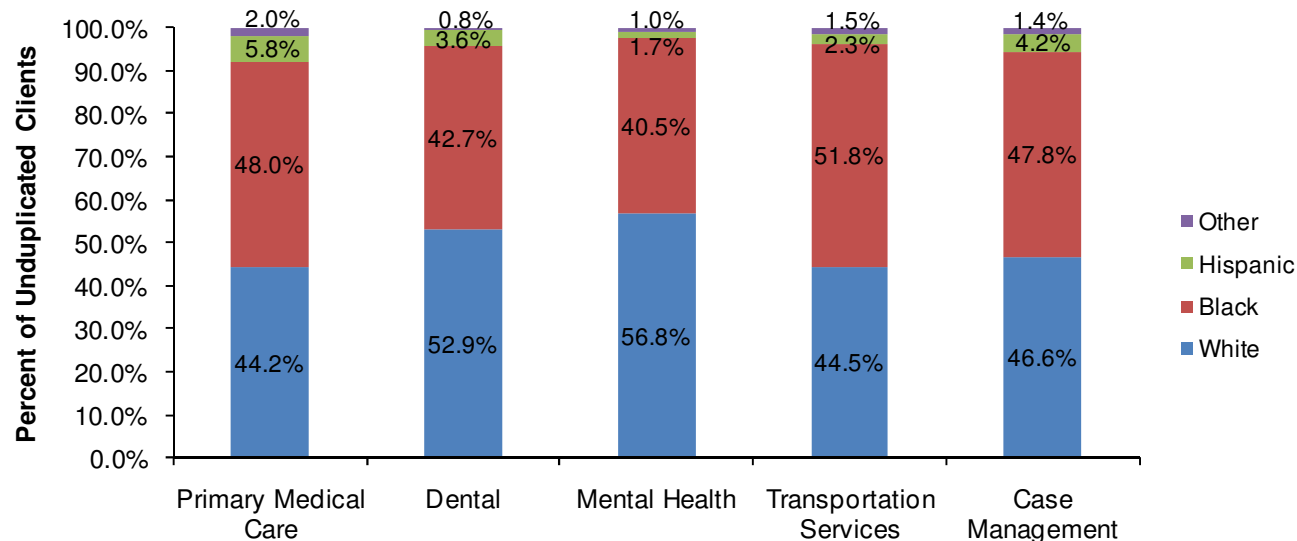
	<u>Primary Medical Care</u>		<u>Dental</u>		<u>Mental Health</u>		<u>Transportation Services</u>		<u>Case Management</u>	
	N*	Mean**	N*	Mean**	N*	Mean**	N*	Mean**	N*	Mean**
St. Louis										
White	375	5.9	323	3.1	67	5.9	108	3.4	929	12.3
Black	746	5.5	411	2.9	102	4.0	443	5.0	1,624	18.6
Hispanic	37	6.1	22	3.3	3	2.0	7	2.4	64	11.6
Other	27	5.4	8	3.8	3	8.7	7	4.7	28	14.8
Total	1,185	5.7	764	3.0	175	4.8	565	4.7	2,645	16.2
Kansas City										
White	294	4.4	124	2.4	29	4.1	12	2.5	678	12.5
Black	363	4.4	123	2.4	11	5.5	3	1.7	737	15.9
Hispanic	70	5.6	18	1.5	1	1.0	1	2.0	111	11.1
Other	17	3.1	2	3.5	0	--	0	--	29	12.3
Total	744	4.5	267	2.4	41	4.4	16	2.3	1,555	14.0
Northwest										
White	37	2.4	6	1.8	2	4.0	0	--	54	9.0
Black	10	2.9	0	--	0	--	0	--	17	10.4
Hispanic	0	--	0	--	0	--	0	--	1	5.0
Other	1	1.0	0	--	0	--	0	--	2	3.0
Total	48	2.5	6	1.8	2	4.0	0	--	74	9.1
North Central										
White	66	5.7	44	2.2	10	3.6	33	2.8	179	15.3
Black	30	5.6	13	2.2	3	2.7	13	2.9	105	14.1
Hispanic	9	7.0	2	1.5	0	--	1	2.0	16	15.3
Other	1	4.0	0	--	0	--	2	1.5	4	8.0
Total	106	5.8	59	2.2	13	3.4	49	2.8	304	14.8
Southwest										
White	278	6.4	166	2.5	61	2.4	211	5.0	535	12.1
Black	35	6.4	14	2.4	6	2.3	20	3.4	62	11.8
Hispanic	27	6.7	5	3.8	1	2.0	12	4.1	35	8.7
Other	5	5.0	1	2.0	0	--	4	3.5	11	9.5
Total	345	6.4	186	2.5	68	2.4	247	4.8	643	11.8
Southeast										
White	55	5.9	37	2.7	2	4.0	65	4.4	171	7.6
Black	17	4.4	4	1.5	0	--	20	3.1	69	7.3
Hispanic	1	4.0	1	3.0	0	--	1	4.0	2	10.5
Other	0	--	0	--	0	--	1	4.0	3	8.7
Total	73	5.5	42	2.6	2	4.0	87	4.1	245	7.5
*Number of unique clients that utilized the service during the year.										
**Mean number of times the service was utilized.										
Source: FACTORS										

Case management represented the service utilized by the largest number of clients in all HIV regions (Table 52). Case management also was associated with a greater mean number of visits per client compared to other services in each HIV region. Primary medical care tended to be the services utilized by the second largest number of clients in all HIV regions. The mean number of primary medical care visits per clients tended to be slightly higher for Hispanics compared to other race/ethnicity groups in all regions except the Northwest and Southeast HIV regions. Transportation services were not utilized among clients in the Northwest HIV region, and utilization of transportation services was low in the Kansas City HIV region.

Figure 65. Percent of Missouri clients utilizing Ryan White funded services, by HIV region, by type of service, 2009

Source: FACTORS

There were differences in the distribution of clients utilizing selected Ryan White funded services by HIV region (Figure 65). St. Louis and Southwest HIV region residents represented a greater proportion of clients receiving mental health and transportation services compared to other services. A greater proportion of clients utilizing transportation services were residents of the Southeast HIV region compared to other service categories. Kansas City HIV region residents represented a greater proportion of clients receiving primary medical care and case management services compared to other service categories. The distribution of service utilization was similar in all service categories for residents in the North Central and Northwest HIV regions. The differences in service utilization may reflect differing service needs by geographic area.

Figure 66. Percent of Missouri clients utilizing Ryan White funded services, by race/ethnicity, by type of service, 2009

Source: FACTORS

There were differences in the distribution of clients utilizing selected Ryan White funded services by race/ethnicity (Figure 66). Whites represented a greater proportion of clients receiving mental health services compared to other services. Blacks represented a greater proportion of clients utilizing transportation services compared to other service categories. A greater proportion of clients receiving primary medical care services were Hispanic compared to other service categories. The differences in the distribution of services utilized by race/ethnicity may indicate areas of differing need among clients based on underlying social and economic differences associated with each demographic group.

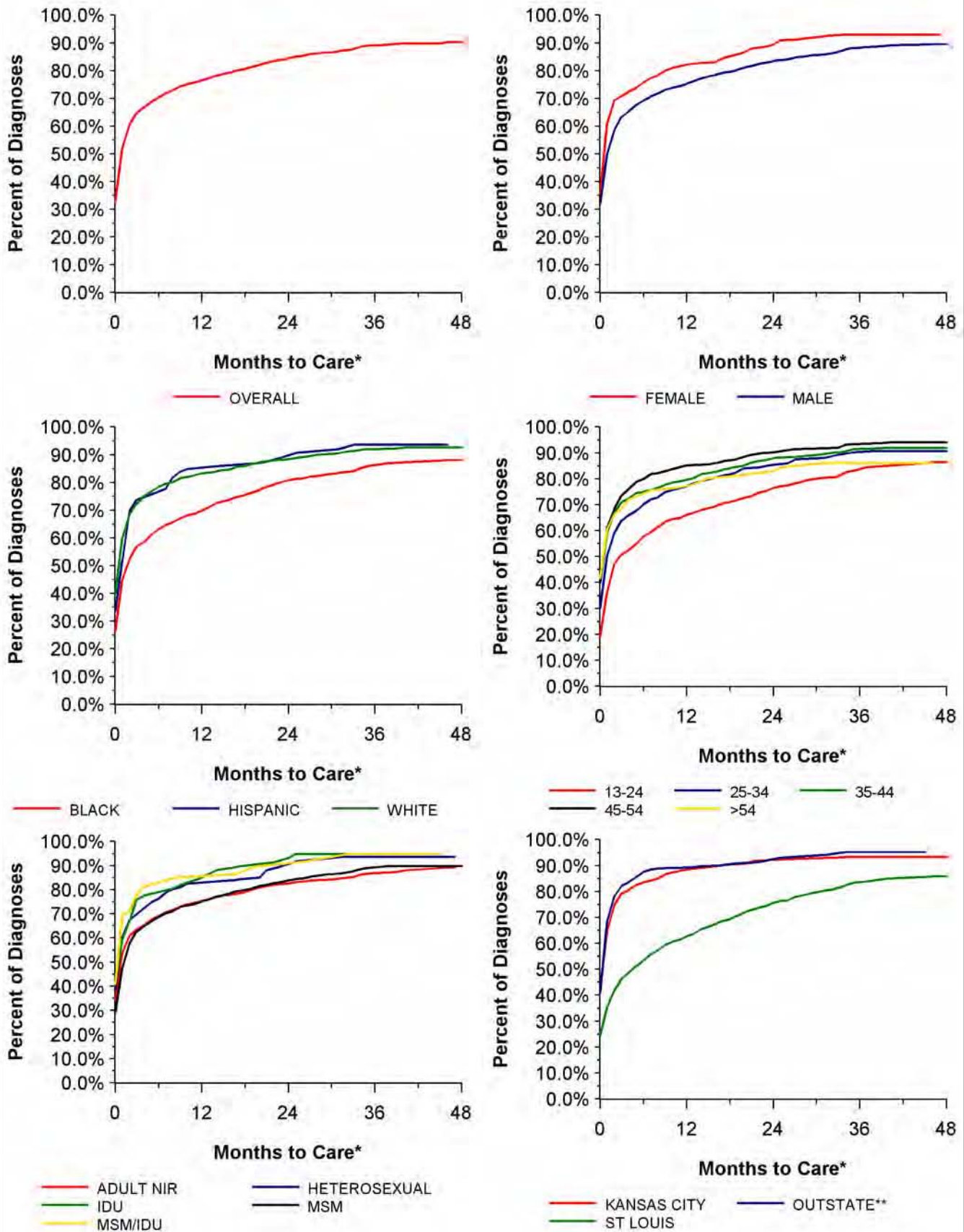
Table 53. Hospital charges and days of care, by viral infection type, by sex, by race*, and by pay source, Missouri, 2007

	Number of Discharges			Hospital Days of Care Total (Per Discharge)			Hospital Charges Total (Per Day Hospitalized)		
	HIV Infection	Hepatitis	Other Viral Infection	HIV Infection	Hepatitis	Other Viral Infection	HIV Infection	Hepatitis	Other Viral Infection
Total	648	534	1,981	5,145	2,434	6,943	\$25,491,695	\$13,477,198	\$28,277,536
				(7.9)	(4.6)	(3.5)	(\$4,955)	(\$5,537)	(\$4,073)
Sex									
Male	500	255	893	3,790	1,167	3,103	\$18,270,830	\$8,110,223	\$13,359,632
				(7.6)	(4.6)	(3.5)	(\$4,821)	(\$6,950)	(\$4,305)
Female	148	279	1,088	1,355	1,267	3,840	\$7,220,865	\$5,366,975	\$14,917,904
				(9.2)	(4.5)	(3.5)	(\$5,329)	(\$4,236)	(\$3,885)
Race*									
White	234	411	1,660	1,845	1,803	5,799	\$8,615,088	\$9,480,610	\$23,654,041
				(7.9)	(4.4)	(3.5)	(\$4,669)	(\$5,258)	(\$4,079)
Black	383	103	222	3,032	523	810	\$15,652,244	\$3,404,960	\$3,398,283
				(7.9)	(5.1)	(3.6)	(\$5,162)	(\$6,510)	(\$4,195)
Pay Source									
Medicare	207	168	555	1,484	824	2,618	\$7,514,199	\$4,857,581	\$10,919,640
				(7.2)	(4.9)	(4.7)	(\$5,063)	(\$5,895)	(\$4,171)
Medicaid	212	135	395	2,011	629	1,154	\$10,435,317	\$2,662,144	\$4,356,470
				(9.5)	(4.7)	(2.9)	(\$5,189)	(\$4,232)	(\$3,775)
Other Government	2	5	20	26	19	49	\$158,703	\$100,390	\$186,392
				(13.0)	(3.8)	(2.5)	(\$6,104)	(\$5,284)	(\$3,804)
Self pay/No Charge	68	71	116	420	253	332	\$2,081,669	\$912,522	\$1,268,978
				(6.2)	(3.6)	(2.9)	(\$4,956)	(\$3,607)	(\$3,822)
Commercial	147	143	870	1,145	625	2,728	\$5,195,632	\$4,866,807	\$11,454,373
				(7.8)	(4.4)	(3.1)	(\$4,538)	(\$7,787)	(\$4,199)
Other	5	8	15	14	26	34	\$54,043	\$71,235	\$84,450
				(2.8)	(3.3)	(2.3)	(\$3,860)	(\$2,740)	(\$2,484)
Unknown	7	4	10	45	58	28	\$52,132	\$6,519	\$7,233
				(6.4)	(14.5)	(2.8)	(\$1,158)	(\$112)	(\$258)

*Includes persons of Hispanic origin
Source: DHSS MICA

Data regarding hospital discharges, days of care, and hospital charges billed in 2007 among Missouri residents whose primary reason for admission was related to a viral infection are displayed in Table 53. Viral infections other than HIV and hepatitis comprised the majority of all hospitalizations (63%). Among persons whose primary reason for admission was related to HIV infection, 65% of the hospitalizations were paid for by Medicare or Medicaid, compared to 57% and 48% of the hospitalizations among persons whose admissions were primarily related to hepatitis and other viral infections, respectively. Although hospital admissions related to HIV infection represented only 20% of all discharges among persons with viral infections, 35% of all days of hospitalization were attributed to HIV infection related admissions. Data regarding the length of hospitalization per discharge should be interpreted with some caution as the data were not adjusted for outliers. Among persons admitted for HIV infection, the length of hospitalization per discharge tended to be slightly longer for females compared to males. This difference between males and females was not observed among persons admitted for hepatitis and other viral infections. The total hospital charges billed was greatest among patients admitted for viral infections other than HIV and hepatitis, primarily because this category represented the greatest number of admissions. Assessing the hospitalization charges per day hospitalized should be interpreted with some caution as the data were not adjusted for outliers. Overall, the billed hospitalization cost per day of hospitalization was greatest for persons admitted for hepatitis (\$5,537). However, among females, the hospitalization cost per day tended to be slightly higher among women with HIV infection as the primary reason for admission (\$5,329) compared to women whose admission were related to hepatitis (\$4,236).

Figure 67. Length of time in months to enter care* after initial HIV diagnosis among persons diagnosed between 2006 and 2008, by selected characteristics, Missouri



*Defined as first reported CD4 lymphocyte or viral load lab result reported to MDHSS.

**Outstate includes the North Central, Northwest, Southeast, and Southwest HIV regions.

Source: eHARS

Figure 67 examines the length of time until first entry into care among persons newly diagnosed with HIV disease between 2006 and 2008. Entry into care was measured as the receipt of a CD4 lymphocyte or viral load laboratory result by MDHSS. Overall by one year after diagnosis, 77% of persons recently diagnosed had entered care. Within four years of initial diagnosis, 90% had entered care. There were differences in the proportion of new diagnoses entering care between males and females. Over time the proportion of females who entered care remained higher than the proportion of males entering care. There were also difference in the proportion of new diagnoses entering care by race/ethnicity. Over time, a significantly lower proportion of blacks entered care compared to whites and Hispanics. At one year after diagnosis, only 70% of blacks had entered care, compared to 83% of whites and 85% of Hispanics. As the age of the individual at the time of diagnosis increased, the probability of entering care over time also increased. Of persons diagnosed between the ages of 13 and 24, only 66% entered care within one year of diagnosis, compared to 77% of persons greater than 54 years of age at the time of diagnosis. Differences in the likelihood of entering care also existed by disease exposure category. MSM and persons with no indicated risk were less likely to enter care over time. At one year after diagnosis, only 75% of MSM and persons with no indicated risk had entered care. Differences in entry to care following diagnosis varied by HIV region of diagnosis. Persons diagnosed in the St. Louis HIV region were significantly less likely to enter into care over time. At one year after diagnosis, 88% of persons diagnosed in Kansas City, 89% of persons diagnosed in Outstate, and 63% of persons diagnosed in the St. Louis HIV region entered care. Entry into care remained lower among those recently diagnosed in the St. Louis HIV region over time. These data can be used to target populations for outreach efforts to assist with entry into HIV medical care among persons recently diagnosed.

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Key Highlights: What are the number and characteristics of the individuals who know they are HIV positive but who are not in care?

Magnitude of the Problem

- Overall, 60% of Missourians living with HIV disease had their primary care medical needs met (i.e., evidence of a CD4 lymphocyte or viral load test or diagnosis with an opportunistic infection in 2009).
- Persons enrolled in HIV medical case management were significantly more likely to have their primary care medical needs met. Of the 11,122 persons living with HIV disease in Missouri, 3,978 (36%) were enrolled in medical case management. Ninety-seven percent of individuals in case management had their primary care medical needs met in 2009.
- Persons living with HIV who were subcategorized as AIDS cases in 2009 were more likely to have their medical needs met (68%) compared to persons subcategorized as HIV cases (50%). Similar patterns were seen regardless of whether the individuals were enrolled in HIV medical case management.
- Enrollment in HIV medical case management and current diagnostic status (i.e., HIV or AIDS) were important factors influencing unmet need.

Where

- Overall, the proportion of individuals with a met need was greatest in the Southwest HIV region (66%), and lowest in the St. Louis HIV region (56%).
- Among those enrolled in HIV medical case management, the proportion with a met need ranged from 96% in the St. Louis HIV region to 99% in the Southwest HIV region.
- For those not enrolled in HIV medical case management, the proportion with a met need ranged from 27% in the Southeast HIV region to 47% in the Kansas City HIV region.

Who

Sex

- Overall, there were not significant differences observed in unmet need by sex, after controlling for factors such as enrollment in HIV medical case management, and current diagnostic status (i.e., HIV or AIDS).

Race/Ethnicity

- Among individuals not enrolled in HIV medical case management, there were differences in the proportion of persons with an unmet primary medical care need by race/ethnicity. Regardless of current diagnostic status, unmet need was greater for blacks than whites.
- Among persons enrolled in HIV medical case management, unmet need was greatest among blacks.

Age

- There were not differences in unmet need by current age among individuals enrolled in HIV medical case management, regardless of diagnostic status.
- There were differences in unmet need by current age among individuals not enrolled in HIV medical case management. Trends were similar among persons classified as HIV and AIDS cases. Among persons currently 19 years of age or greater, unmet need increased with increasing age.

Exposure Category

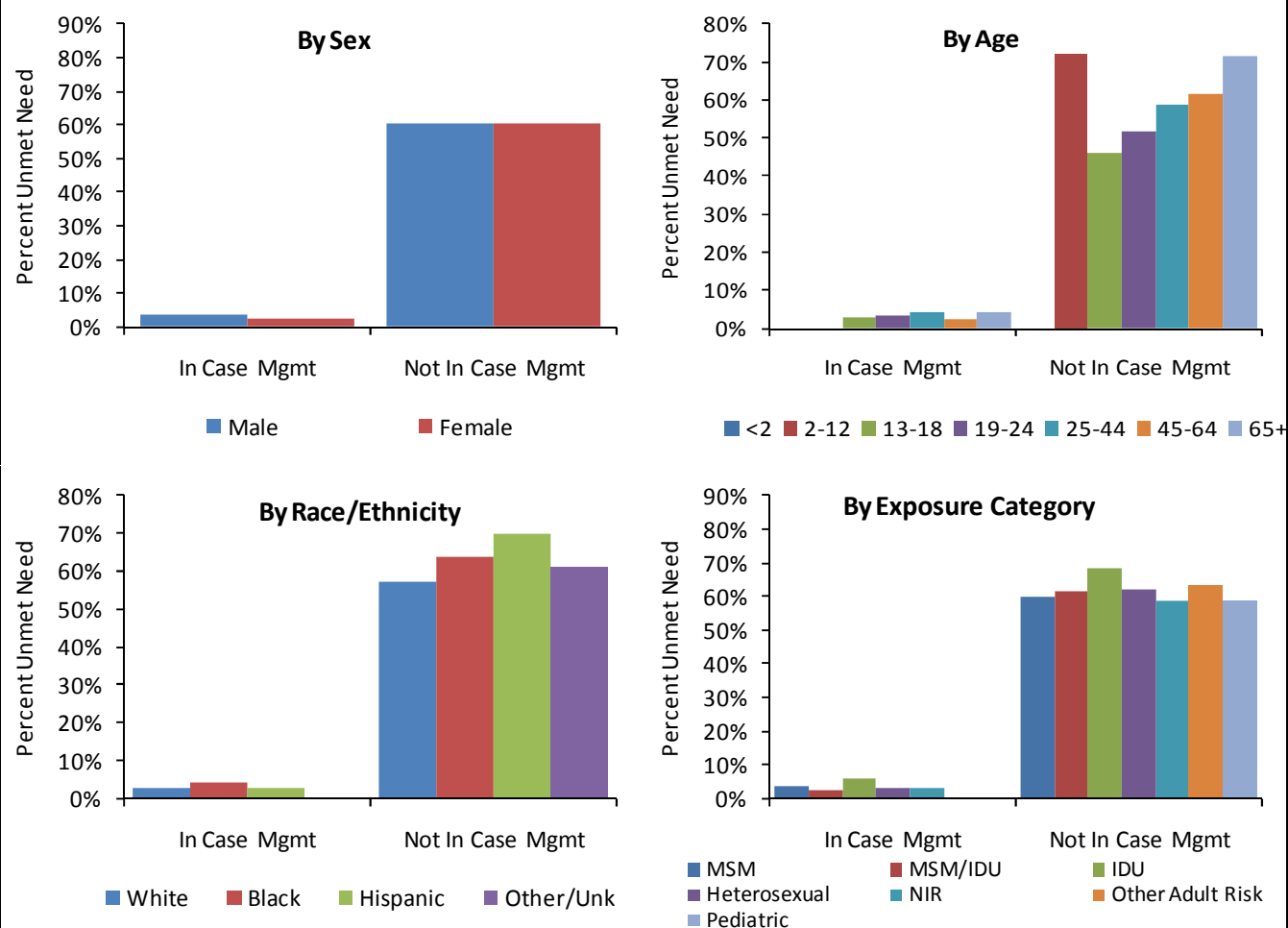
- There were not significant differences in unmet need by exposure category among individuals enrolled in HIV medical case management, regardless of diagnostic status. Among individuals in HIV medical case management, MSM represented the largest number of persons with unmet need (78). However, this group also represented the largest number of individuals enrolled in case management (2,263).
- There were differences in unmet need by exposure category among individuals not enrolled in HIV medical case management. Different trends in unmet need were observed based on the current diagnostic status of the individual. However, among both persons classified as HIV and AIDS cases, unmet need was highest among injection drug users. Among persons classified as HIV cases, unmet need was second greatest among adults whose infection was attributed to heterosexual contact. Among HIV cases, unmet need was lowest among persons infected at less than 13 years of age. Among persons classified as AIDS cases, unmet need was second greatest among persons with a risk attributed to the receipt of clotting factors, contaminated blood products, or occupational exposures.

Table 54. The impact of HIV case management on access to primary medical care by region* and race/ethnicity among individuals living with HIV disease as of December 31, 2009						
Region	Total HIV Population		Enrolled in Case Management		Not Enrolled in Case Management	
	Met Need** N (%)	Unmet Need*** N (%)	Met Need** N (%)	Unmet Need*** N (%)	Met Need** N (%)	Unmet Need*** N (%)
St. Louis Region						
White	1,288 (54.7%)	1,065 (45.3%)	662 (96.6%)	23 (3.4%)	626 (37.5%)	1,042 (62.5%)
Black	1,615 (56.9%)	1,224 (43.1%)	1,060 (94.8%)	58 (5.2%)	555 (32.2%)	1,166 (67.8%)
Hispanic	63 (50.8%)	61 (49.2%)	44 (95.7%)	2 (4.3%)	19 (24.4%)	59 (75.6%)
Other/Unk.	38 (52.8%)	34 (47.2%)	21 (100.0%)	0 (0.0%)	17 (33.3%)	34 (66.7%)
Total	3,004 (55.8%)	2,384 (44.2%)	1,787 (95.6%)	83 (4.4%)	1,217 (34.6%)	2,301 (65.4%)
Kansas City Region						
White	1,140 (64.6%)	624 (35.4%)	512 (97.5%)	13 (2.5%)	628 (50.7%)	611 (49.3%)
Black	808 (65.8%)	420 (34.2%)	501 (97.7%)	12 (2.3%)	307 (42.9%)	408 (57.1%)
Hispanic	108 (54.8%)	89 (45.2%)	63 (98.4%)	1 (1.6%)	45 (33.8%)	88 (66.2%)
Other/Unk.	32 (69.6%)	14 (30.4%)	17 (100.0%)	0 (0.0%)	15 (51.7%)	14 (48.3%)
Total	2,088 (64.5%)	1,147 (35.5%)	1,093 (97.7%)	26 (2.3%)	995 (47.0%)	1,121 (53.0%)
Northwest Region						
White	59 (64.1%)	33 (35.9%)	29 (96.7%)	1 (3.3%)	30 (48.4%)	32 (51.6%)
Black	11 (64.7%)	6 (35.3%)	6 (100.0%)	0 (0.0%)	5 (45.5%)	6 (54.5%)
Hispanic	1 (25.0%)	3 (75.0%)	0 (N/A)	0 (N/A)	1 (25.0%)	3 (75.0%)
Other/Unk.	1 (50.0%)	1 (50.0%)	0 (N/A)	0 (N/A)	1 (50.0%)	1 (50.0%)
Total	72 (62.6%)	43 (37.4%)	35 (97.2%)	1 (2.8%)	37 (46.8%)	42 (53.2%)
North Central Region						
White	204 (63.0%)	120 (37.0%)	112 (98.2%)	2 (1.8%)	92 (43.8%)	118 (56.2%)
Black	62 (52.1%)	57 (47.9%)	35 (94.6%)	2 (5.4%)	27 (32.9%)	55 (67.1%)
Hispanic	15 (65.2%)	8 (34.8%)	10 (100.0%)	0 (0.0%)	5 (38.5%)	8 (61.5%)
Other/Unk.	4 (66.7%)	2 (33.3%)	3 (100.0%)	0 (0.0%)	1 (33.3%)	2 (66.7%)
Total	285 (60.4%)	187 (39.6%)	160 (97.6%)	4 (2.4%)	125 (40.6%)	183 (59.4%)
Southwest Region						
White	465 (67.6%)	223 (32.4%)	326 (99.1%)	3 (0.9%)	139 (38.7%)	220 (61.3%)
Black	47 (54.7%)	39 (45.3%)	31 (100.0%)	0 (0.0%)	16 (29.1%)	39 (70.9%)
Hispanic	23 (67.6%)	11 (32.4%)	20 (95.2%)	1 (4.8%)	3 (23.1%)	10 (76.9%)
Other/Unk.	7 (58.3%)	5 (41.7%)	5 (100.0%)	0 (0.0%)	2 (28.6%)	5 (71.4%)
Total	542 (66.1%)	278 (33.9%)	382 (99.0%)	4 (1.0%)	160 (36.9%)	274 (63.1%)
Southeast Region						
White	138 (60.5%)	90 (39.5%)	104 (96.3%)	4 (3.7%)	34 (28.3%)	86 (71.7%)
Black	54 (58.7%)	38 (41.3%)	42 (97.7%)	1 (2.3%)	12 (24.5%)	37 (75.5%)
Hispanic	3 (60.0%)	2 (40.0%)	2 (100.0%)	0 (0.0%)	1 (33.3%)	2 (66.7%)
Other/Unk.	1 (50.0%)	1 (50.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)
Total	196 (59.9%)	131 (40.1%)	149 (96.8%)	5 (3.2%)	47 (27.2%)	126 (72.8%)
Statewide (MO)****						
White	3,443 (60.6%)	2,243 (39.4%)	1,813 (97.4%)	48 (2.6%)	1,630 (42.6%)	2,195 (57.4%)
Black	2,916 (59.6%)	1,973 (40.4%)	1,841 (95.9%)	79 (4.1%)	1,075 (36.2%)	1,894 (63.8%)
Hispanic	220 (54.7%)	182 (45.3%)	143 (97.3%)	4 (2.7%)	77 (30.2%)	178 (69.8%)
Other/Unk.	87 (60.0%)	58 (40.0%)	50 (100.0%)	0 (0.0%)	37 (38.9%)	58 (61.1%)
Total	6,666 (59.9%)	4,456 (40.1%)	3,847 (96.7%)	131 (3.3%)	2,819 (39.5%)	4,325 (60.5%)
*Includes all individual still living whose most recent diagnosis (i.e., HIV or AIDS) occurred in the region. Does not reflect the number of individuals currently living in the region. **Evidence of a CD4+ T-lymphocyte or viral load laboratory test result or diagnosis with an opportunistic infection in the current year. *** No evidence of a CD4+ T-lymphocyte or viral load laboratory test result or diagnosis with an opportunistic infection in the current year. ****Statewide figures includes living individuals whose most recent diagnosis occurred in a correctional facility or is unknown.						

Of the 11,122 persons living with HIV at the end of 2009, 60% had evidence of met primary care medical needs (i.e., met need) in 2009 (Table 54). The primary care medical need was considered to be met if an individual had a CD4 lymphocyte or viral load laboratory test or diagnosis of an opportunistic infection in 2009 that was reported to MDHSS. There were differences in the proportion of individuals with met needs depending on whether the individual was enrolled in HIV medical case management in 2009. A significantly greater proportion of those enrolled in HIV medical case management had a met need (97%) in 2009 compared to those not enrolled (40%). Several factors may contribute to the differences observed. First, case management assists clients to locate and access medical care by referral. Second, case management clients receive health education and counseling to understand the nature of routine medical care. Third, case management assists clients in identifying appropriate payer sources to fund routine medical care. Finally, it is possible that those not enrolled in case management were less likely to be currently living in Missouri, and therefore indicators of primary medical care would not be reported to MDHSS. The data were presented based on individuals whose most recent diagnosis occurred in Missouri, not those known to be currently living in Missouri, as accurate data on current residence is difficult to collect.

There were differences in the proportion of individuals with a met need by HIV region. It is important to note that data presented by HIV region represent those who currently have a met need that were most recently diagnosed with HIV or AIDS in the selected HIV region. It does not necessarily reflect where individuals are currently living and receiving care. Overall, the proportion of individuals with a met need was greatest in the Southwest HIV region (66%), and lowest in the St. Louis HIV region (56%). The pattern was slightly different between the regions depending on whether individuals were enrolled in HIV medical case management. For those not enrolled in HIV medical case management, the proportion with a met need ranged from 27% in the Southeast HIV region to 47% in the Kansas City HIV region.

There were differences in the proportion of persons with a met need by race/ethnicity. Overall statewide, met need was lowest among Hispanics (55%) and similar for all other race/ethnicity categories presented. Within each region and depending on whether the individuals were enrolled in HIV medical case management, the patterns by race/ethnicity varied slightly. Among individuals not enrolled in case management, the proportion of blacks with a met need was lower in all HIV regions compared to whites, and the proportion of Hispanics with a met need was lower in all HIV regions compared to whites, except in the Southeast HIV region where the number of Hispanic individuals was very small.

Figure 68. Percent of individuals living with HIV having an unmet* primary medical care need in 2009 by enrollment in HIV case management and selected characteristics

*No evidence of a CD4+ T-lymphocyte or viral load laboratory test result or diagnosis with an opportunistic infection in the current year.

Figure 68 examines the proportion of cases with unmet need depending on whether the individuals were enrolled in HIV medical case management for selected characteristics. There were not differences in the proportion of individuals with unmet needs between the sexes, regardless of whether enrolled in HIV medical case management. There were differences in the proportion of individuals with unmet needs by current age among those not enrolled in case management. Unmet need was greatest among persons greater than 65 or more years of age and children 2-12 years of age (72%). Those currently 13-18 years of age had the lowest proportion of unmet need. There were not differences in the proportion of individuals with unmet needs by current age among those enrolled in case management. There were differences in the proportion of individuals with unmet needs by race/ethnicity among those not enrolled in case management, and among those enrolled in case management. Among those not enrolled in case management, unmet need was greatest among Hispanics (70%) and lowest among whites (57%). Among those enrolled in case management, unmet need was greatest among blacks (4%). There were differences in the proportion of individuals with unmet need by exposure category among those not in case management, but there were not differences among those enrolled in case management. For individuals not enrolled in case management, unmet need was greatest among IDU (68%) and lowest among pediatric cases (59%), and those with no indicated risk (NIR) (59%). The lower proportion of unmet need among those with no indicated risk may be related to the fact that these cases were more recently diagnosed. It is recommended that new diagnoses have a CD4 lymphocyte and viral load test completed, which indicates a met need, but those newly diagnosed may not feel comfortable reporting risk information to their new provider, or medical providers may not have had as many opportunities to obtain this information.

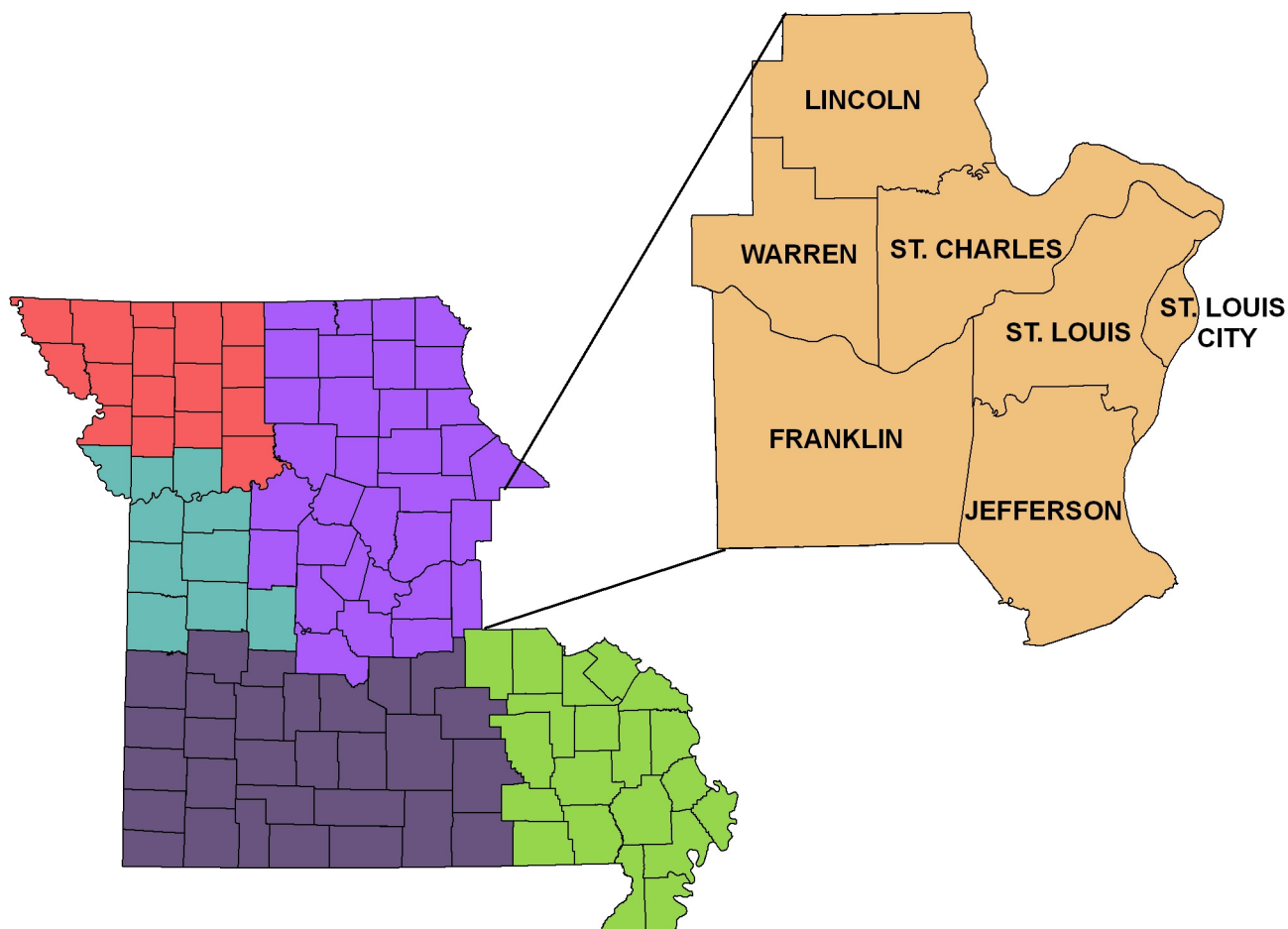
Table 55 examines the proportion of cases reported with unmet need based on current status (i.e., HIV or AIDS) and selected characteristics. Overall, the proportion of those with an unmet need was greater for those classified as HIV cases compared to AIDS cases. The same trend was observed regardless of whether individuals were enrolled in HIV medical case management.

	Total Population		Enrolled in Case Management		Not Enrolled in Case Management	
	HIV Cases with Unmet Need* % (N)	AIDS Cases with Unmet Need* % (N)	HIV Cases with Unmet Need* % (N)	AIDS Cases with Unmet Need* % (N)	HIV Cases with Unmet Need* % (N)	AIDS Cases with Unmet Need* % (N)
Sex						
Male	51.5% (2,139)	33.0% (1,689)	4.0% (45)	3.2% (64)	69.1% (2,094)	52.3% (1,625)
Female	43.1% (398)	24.8% (230)	3.3% (12)	2.1% (10)	69.3% (386)	49.2% (220)
Race/Ethnicity						
White	47.3% (1,205)	33.1% (1,038)	3.4% (24)	2.1% (24)	64.3% (1,181)	51.0% (1,014)
Black	52.5% (1,186)	29.9% (787)	4.5% (31)	3.9% (48)	74.0% (1,155)	52.5% (739)
Hispanic	53.1% (103)	38.0% (79)	3.3% (2)	2.3% (2)	75.4% (101)	63.6% (77)
Other/Unknown	55.1% (43)	22.4% (15)	0.0% (0)	0.0% (0)	76.8% (43)	38.5% (15)
Current Age†						
<2	-- (0)	-- (0)	-- (0)	-- (0)	-- (0)	-- (0)
2-12	50.0% (16)	66.7% (2)	0.0% (0)	0.0% (0)	69.6% (16)	100.0% (2)
13-18	25.0% (11)	12.5% (2)	4.2% (1)	0.0% (0)	50.0% (10)	33.3% (2)
19-24	34.2% (117)	7.6% (8)	4.0% (6)	1.5% (1)	58.1% (111)	18.4% (7)
25-44	47.3% (1,205)	28.0% (668)	4.3% (34)	4.0% (43)	66.9% (1,171)	48.2% (625)
45-64	55.3% (1,083)	33.5% (1,101)	3.1% (15)	2.2% (28)	72.6% (1,068)	53.4% (1,073)
65+	70.5% (105)	54.3% (138)	5.9% (1)	3.9% (2)	78.8% (104)	67.0% (136)
Exposure Category						
Men who have sex with men	49.7% (1,432)	32.7% (1,193)	3.7% (30)	3.3% (48)	67.9% (1,402)	52.0% (1,145)
Men who have sex with men and inject drugs	41.7% (91)	34.5% (145)	3.3% (3)	1.7% (3)	68.8% (88)	58.0% (142)
Injecting drug use	57.4% (159)	38.7% (169)	8.1% (6)	4.9% (9)	75.4% (153)	63.0% (160)
Heterosexual contact	49.0% (349)	27.6% (226)	3.6% (9)	2.3% (9)	73.4% (340)	50.0% (217)
No indicated risk (NIR)	51.8% (471)	24.1% (155)	3.9% (9)	1.8% (5)	68.2% (462)	40.9% (150)
Other Adult Risk	55.0% (11)	48.1% (25)	0.0% (0)	0.0% (0)	68.8% (11)	61.0% (25)
Pediatric	42.1% (24)	20.7% (6)	0.0% (0)	0.0% (0)	64.9% (24)	42.9% (6)
Total	50.0%(2,537)	31.7%(1,919)	3.8%(57)	3.0%(74)	69.1%(2,480)	51.9%(1,845)

*No evidence of a CD4+ T-lymphocyte or viral load laboratory test result or diagnosis with an opportunistic infection in the current year.
 **HIV case vs. AIDS case.
 †Based on age as of December 31, 2009
 Note: Rows with the percent marked '-.-' indicates that there were no living persons in the selected category.

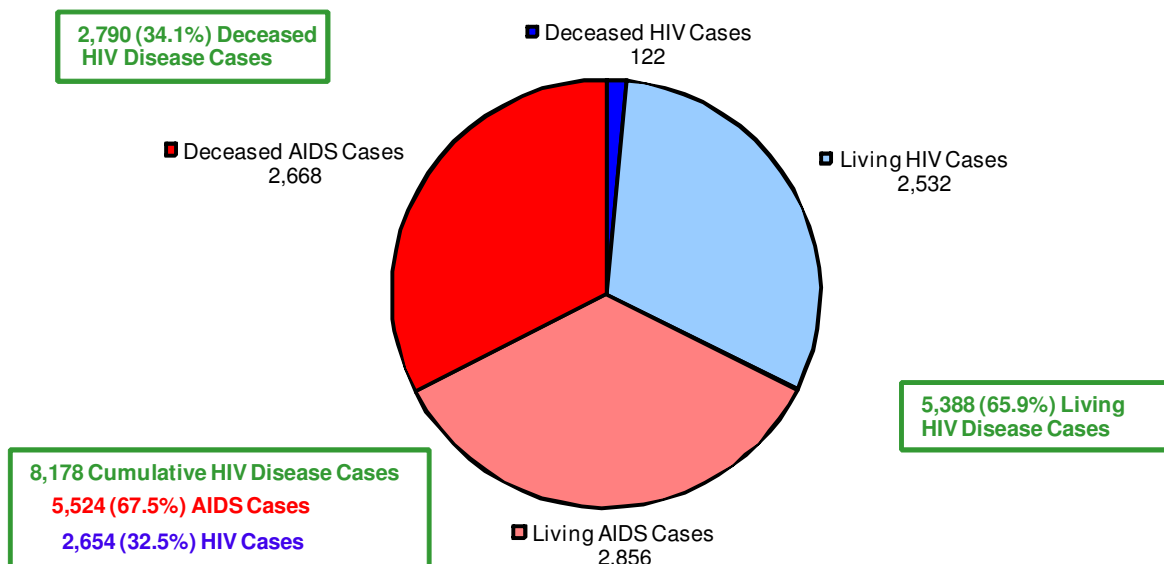
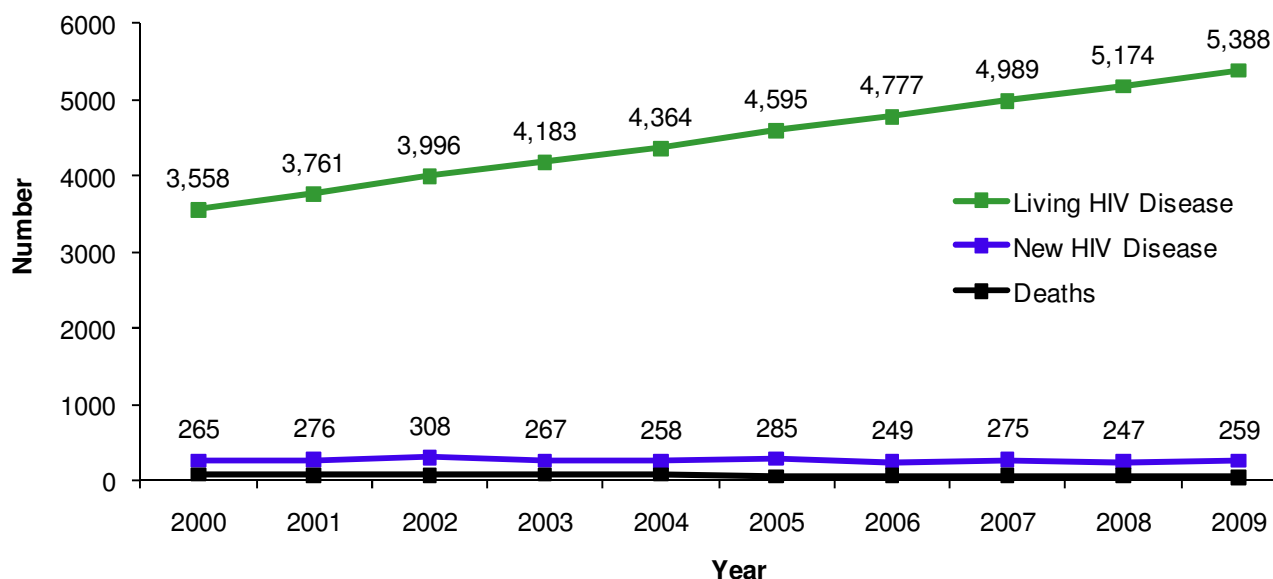
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ST. LOUIS REGION



Population Estimates, St. Louis HIV Region, 2008

County	White		Black		Hispanic		Asian/Pacific Islander		American Indian/Alaskan Native		Two or More Races		Total
Franklin County	97,240	96.4%	1,087	1.1%	1,077	1.1%	340	0.3%	258	0.3%	896	0.9%	100,898
Jefferson County	207,314	95.2%	2,695	1.2%	3,272	1.5%	1,552	0.7%	640	0.3%	2,206	1.0%	217,679
Lincoln County	49,727	94.2%	1,231	2.3%	914	1.7%	135	0.3%	157	0.3%	611	1.2%	52,775
St. Charles County	314,845	90.1%	14,479	4.1%	8,288	2.4%	6,622	1.9%	903	0.3%	4,270	1.2%	349,407
St. Louis County	709,281	71.5%	214,205	21.6%	22,729	2.3%	31,283	3.2%	2,072	0.2%	12,260	1.2%	991,830
St. Louis City	158,867	44.8%	172,120	48.6%	10,286	2.9%	7,394	2.1%	968	0.3%	4,726	1.3%	354,361
Warren County	29,111	93.3%	845	2.7%	738	2.4%	92	0.3%	117	0.4%	311	1.0%	31,214
Region Total	1,566,385	74.7%	406,662	19.4%	47,304	2.3%	47,418	2.3%	5,115	0.2%	25,280	1.2%	2,098,164

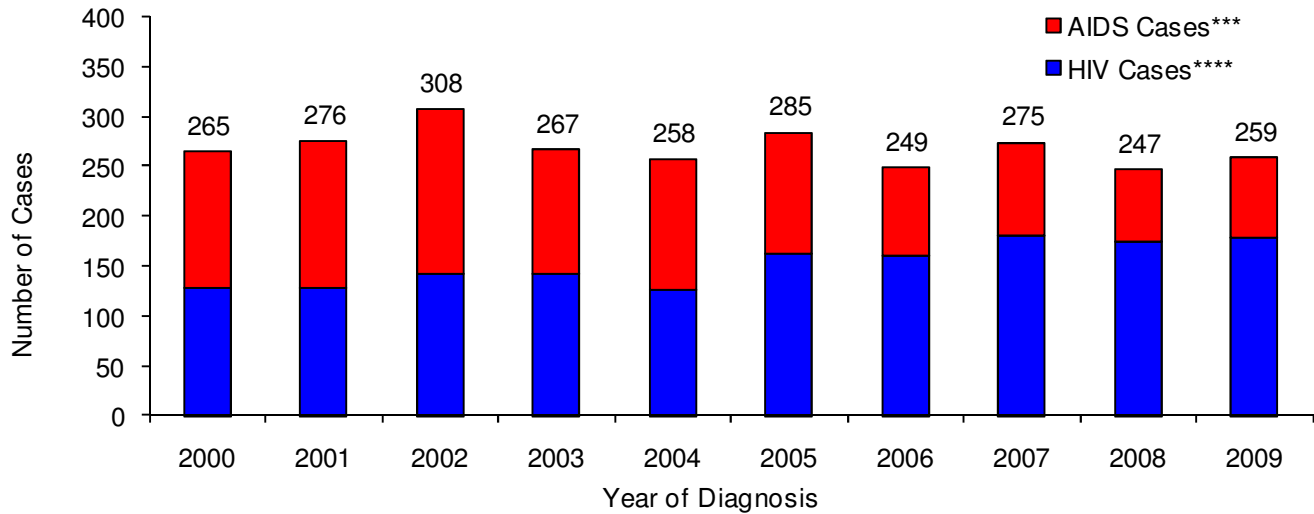
Figure 1. HIV disease cases (living and deceased), by current HIV vs. AIDS status, St. Louis HIV Region, 1982—2009**Figure 2. Living and new HIV disease cases and deaths by year*, St. Louis HIV Region, 2000—2009**

*For living HIV disease cases-the number of individuals living with HIV disease at the end of the year; For new HIV disease cases-the number of individuals newly diagnosed in the year, For HIV disease deaths-the number of individuals that died in the year.

From 1982 to 2009, there have been a total of 8,178 HIV disease cases diagnosed in the St. Louis HIV region and reported to MDHSS (Figure 1). Of the cumulative cases reported, 66% were still presumed to be living with HIV disease at the end of 2009. Among those living with HIV disease, 2,532 were classified as HIV cases at the end of 2009 and 2,856 were classified as AIDS cases.

At the end of 2009, there were 5,388 persons living with HIV disease whose most recent diagnosis occurred in the St. Louis region (Figure 2). The number of people living with HIV disease increased every year. There were 259 new HIV disease diagnoses in 2009. The number of new diagnoses has fluctuated slightly over time. The number of deaths among persons with HIV disease has remained generally steady.

Figure 3. HIV disease cases, by current status* and year of diagnosis, St. Louis HIV Region, 2000—2009**



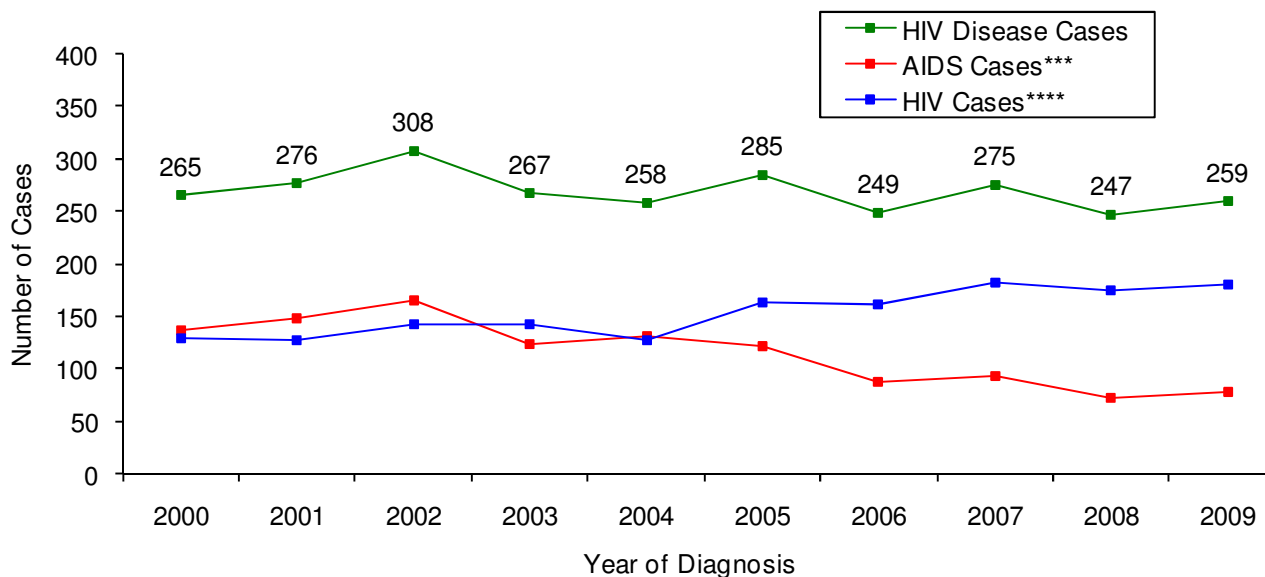
*HIV case vs. AIDS case

**Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2009.

Figure 4. Reported HIV disease cases, by current status* and year of diagnosis, St. Louis HIV Region, 2000—2009**



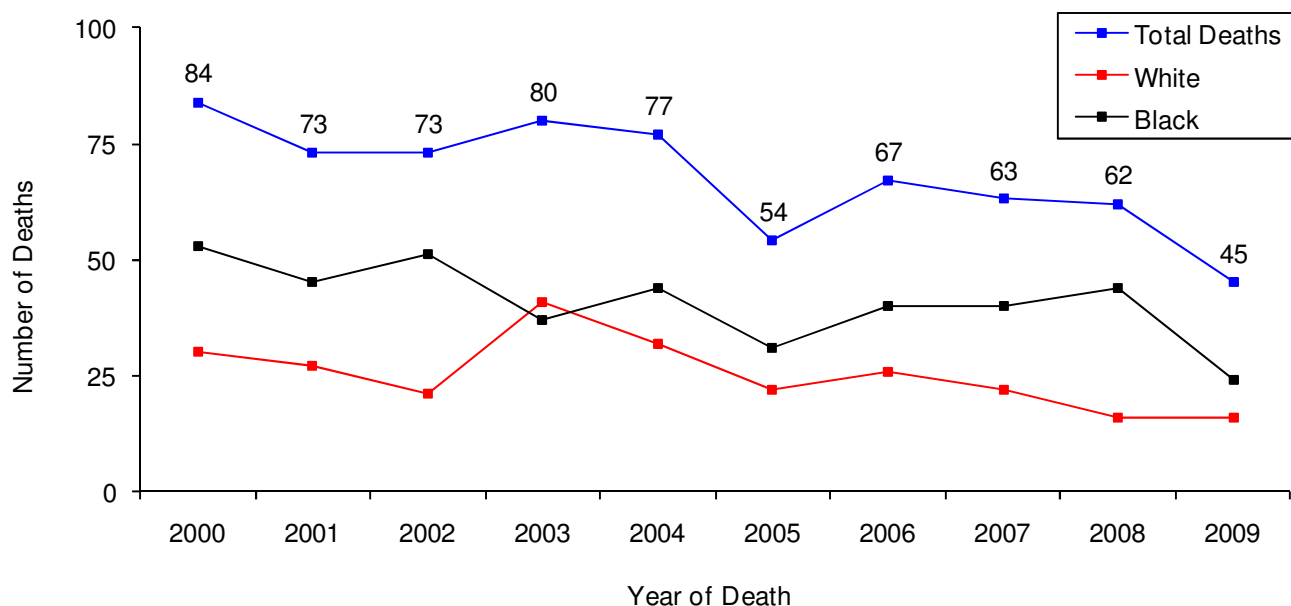
*HIV case vs. AIDS case

**Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

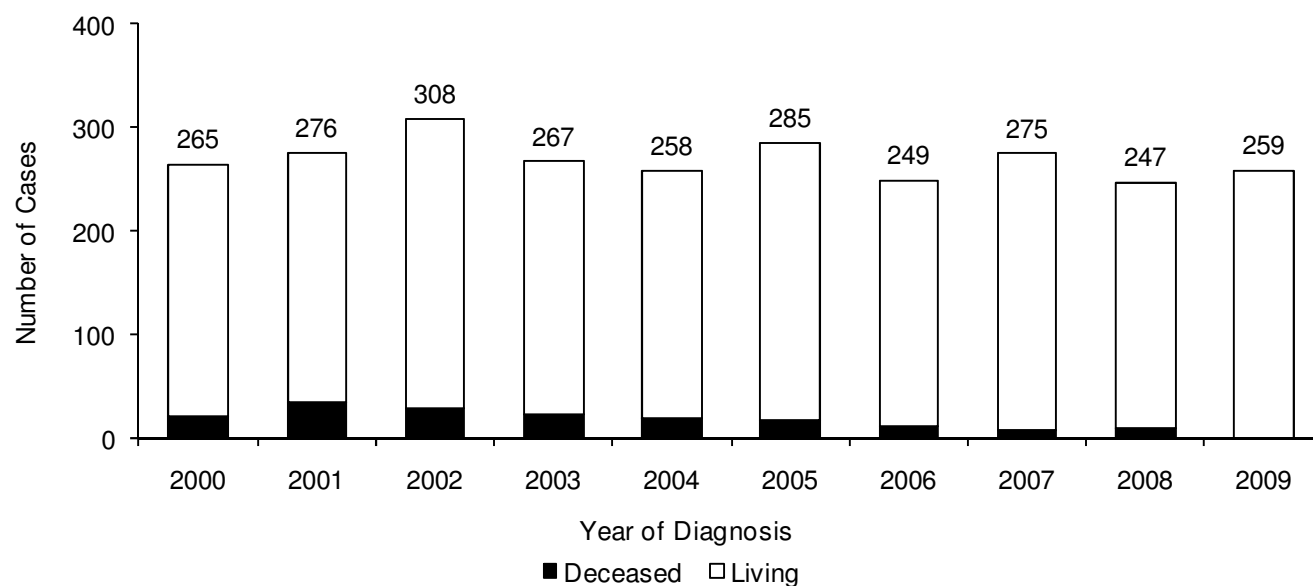
****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2009.

The number of new diagnoses has remained fairly stable from 2000 to 2009, with increases observed in 2002 and 2005. Differences in the number of persons sub-classified as AIDS cases each year are due to the progression of the disease over time.

Figure 5. HIV disease deaths*, by selected race, by year of death, St. Louis HIV Region, 2000—2009

*Includes deaths that have occurred among those diagnosed with HIV disease in the St. Louis HIV region.

†Only includes deaths through December 31, 2009, and reported by February 28, 2010.

Figure 6. Persons diagnosed with HIV disease by current vital status* and year of diagnosis, St. Louis HIV Region, 2000—2009**

*Vital status on December 31, 2009.

**Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

The number of deaths among persons with HIV disease generally decreased from 2000-2005, increased from 2005-2006, and then decreased through 2009 (Figure 5). The general decrease in the number of deaths over time is likely related to the use of highly active antiretroviral therapy (HAART).

Of the 265 persons diagnosed with HIV disease in 2000, 22 (8%) were deceased by the end of 2009 (Figure 6). Among the 259 individuals first diagnosed in 2009, one (<1%) was deceased at the end of 2009. The difference in the proportion of cases that are deceased is due to the length of time individuals have been living with the disease.

Table 1. Living[†] HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and by current age, St. Louis HIV Region, 2009

	HIV*			AIDS**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	2,057	81.2%	203.0	2,420	84.7%	238.8	4,477	83.1%	441.8
Female	475	18.8%	43.8	436	15.3%	40.2	911	16.9%	84.0
Total	2,532	100.0%	120.7	2,856	100.0%	136.1	5,388	100.0%	256.8
Race/Ethnicity									
White	1,083	42.8%	69.1	1,270	44.5%	81.1	2,353	43.7%	150.2
Black	1,333	52.6%	327.8	1,506	52.7%	370.3	2,839	52.7%	698.1
Hispanic	73	2.9%	154.3	51	1.8%	107.8	124	2.3%	262.1
Asian/Pacific Islander	13	0.5%	27.4	10	0.4%	21.1	23	0.4%	48.5
American Indian/Alaskan Native	2	0.1%	39.1	1	0.0%	19.6	3	0.1%	58.7
Two or More Races/Unknown	28	1.1%	--	18	0.6%	--	46	0.9%	--
Total	2,532	100.0%	120.7	2,856	100.0%	136.1	5,388	100.0%	256.8
Race/Ethnicity-Males									
White Male	972	47.3%	126.9	1,181	48.8%	154.2	2,153	48.1%	281.1
Black Male	992	48.2%	536.2	1,172	48.4%	633.5	2,164	48.3%	1169.6
Hispanic Male	56	2.7%	226.8	44	1.8%	178.2	100	2.2%	405.1
Asian/Pacific Islander Male	11	0.5%	48.0	6	0.2%	26.2	17	0.4%	74.2
American Indian/Alaskan Native Male	2	0.1%	78.9	1	0.0%	39.5	3	0.1%	118.4
Two or More Races/Unknown Male	24	1.2%	--	16	0.7%	--	40	0.9%	--
Total	2,057	100.0%	203.0	2,420	100.0%	238.8	4,477	100.0%	441.8
Race/Ethnicity-Females									
White Female	111	23.4%	13.9	89	20.4%	11.1	200	22.0%	25.0
Black Female	341	71.8%	153.9	334	76.6%	150.7	675	74.1%	304.5
Hispanic Female	17	3.6%	75.2	7	1.6%	30.9	24	2.6%	106.1
Asian/Pacific Islander Female	2	0.4%	8.2	4	0.9%	16.3	6	0.7%	24.5
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	4	0.8%	--	2	0.5%	--	6	0.7%	--
Total	475	100.0%	43.8	436	100.0%	40.2	911	100.0%	84.0
Current Age[‡]									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	16	0.6%	5.3	2	0.1%	0.7	18	0.3%	6.0
13-18	24	0.9%	13.2	9	0.3%	5.0	33	0.6%	18.2
19-24	187	7.4%	113.8	46	1.6%	28.0	233	4.3%	141.8
25-44	1,237	48.9%	227.0	1,097	38.4%	201.3	2,334	43.3%	428.4
45-64	975	38.5%	166.6	1,552	54.3%	265.2	2,527	46.9%	431.7
65+	93	3.7%	34.9	150	5.3%	56.3	243	4.5%	91.2
Total	2,532	100.0%	120.7	2,856	100.0%	136.1	5,388	100.0%	256.8

[†]Includes persons diagnosed with HIV disease in the St. Louis HIV Region who are currently living, regardless of current residence.

*Cases which remained HIV cases at the end of 2009.

**Cases classified as AIDS by December 31, 2009.

***The sum of HIV cases and AIDS cases.

****Per 100,000 population based on 2008 MDHSS estimates.

[‡]Based on age as of December 31, 2009.

Note: Percentages may not total due to rounding.

Table 2. Diagnosed HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and current age, St. Louis HIV Region, 2009

	HIV*			AIDS**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	149	82.8%	14.7	64	81.0%	6.3	213	82.2%	21.0
Female	31	17.2%	2.9	15	19.0%	1.4	46	17.8%	4.2
Total	180	100.0%	8.6	79	100.0%	3.8	259	100.0%	12.3
Race/Ethnicity									
White	58	32.2%	3.7	26	32.9%	1.7	84	32.4%	5.4
Black	112	62.2%	27.5	51	64.6%	12.5	163	62.9%	40.1
Hispanic	5	2.8%	10.6	1	1.3%	2.1	6	2.3%	12.7
Asian/Pacific Islander	1	0.6%	2.1	0	0.0%	0.0	1	0.4%	2.1
American Indian/Alaskan Native	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown	4	2.2%	--	1	1.3%	--	5	1.9%	--
Total	180	100.0%	8.6	79	100.0%	3.8	259	100.0%	12.3
Race/Ethnicity-Males									
White Male	53	35.6%	6.9	24	37.5%	3.1	77	36.2%	10.1
Black Male	86	57.7%	46.5	38	59.4%	20.5	124	58.2%	67.0
Hispanic Male	5	3.4%	20.3	1	1.6%	4.1	6	2.8%	24.3
Asian/Pacific Islander Male	1	0.7%	4.4	0	0.0%	0.0	1	0.5%	4.4
American Indian/Alaskan Native Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Male	4	2.7%	--	1	1.6%	--	5	2.3%	--
Total	149	100.0%	14.7	64	100.0%	6.3	213	100.0%	21.0
Race/Ethnicity-Females									
White Female	5	16.1%	0.6	2	13.3%	0.2	7	15.2%	0.9
Black Female	26	83.9%	11.7	13	86.7%	5.9	39	84.8%	17.6
Hispanic Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Asian/Pacific Islander Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	31	100.0%	2.9	15	100.0%	1.4	46	100.0%	4.2
Current Age†									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
13-18	13	7.2%	7.2	1	1.3%	0.6	14	5.4%	7.7
19-24	49	27.2%	29.8	10	12.7%	6.1	59	22.8%	35.9
25-44	99	55.0%	18.2	36	45.6%	6.6	135	52.1%	24.8
45-64	19	10.6%	3.2	28	35.4%	4.8	47	18.1%	8.0
65+	0	0.0%	0.0	4	5.1%	1.5	4	1.5%	1.5
Total	180	100.0%	8.6	79	100.0%	3.8	259	100.0%	12.3

*HIV cases diagnosed during 2009 which remained HIV cases at the end of the year.

**AIDS cases initially diagnosed in 2009.

***The sum of newly diagnosed HIV cases and newly diagnosed AIDS cases. Does not include cases diagnosed prior to 2008 with HIV, which progressed to AIDS in 2009.

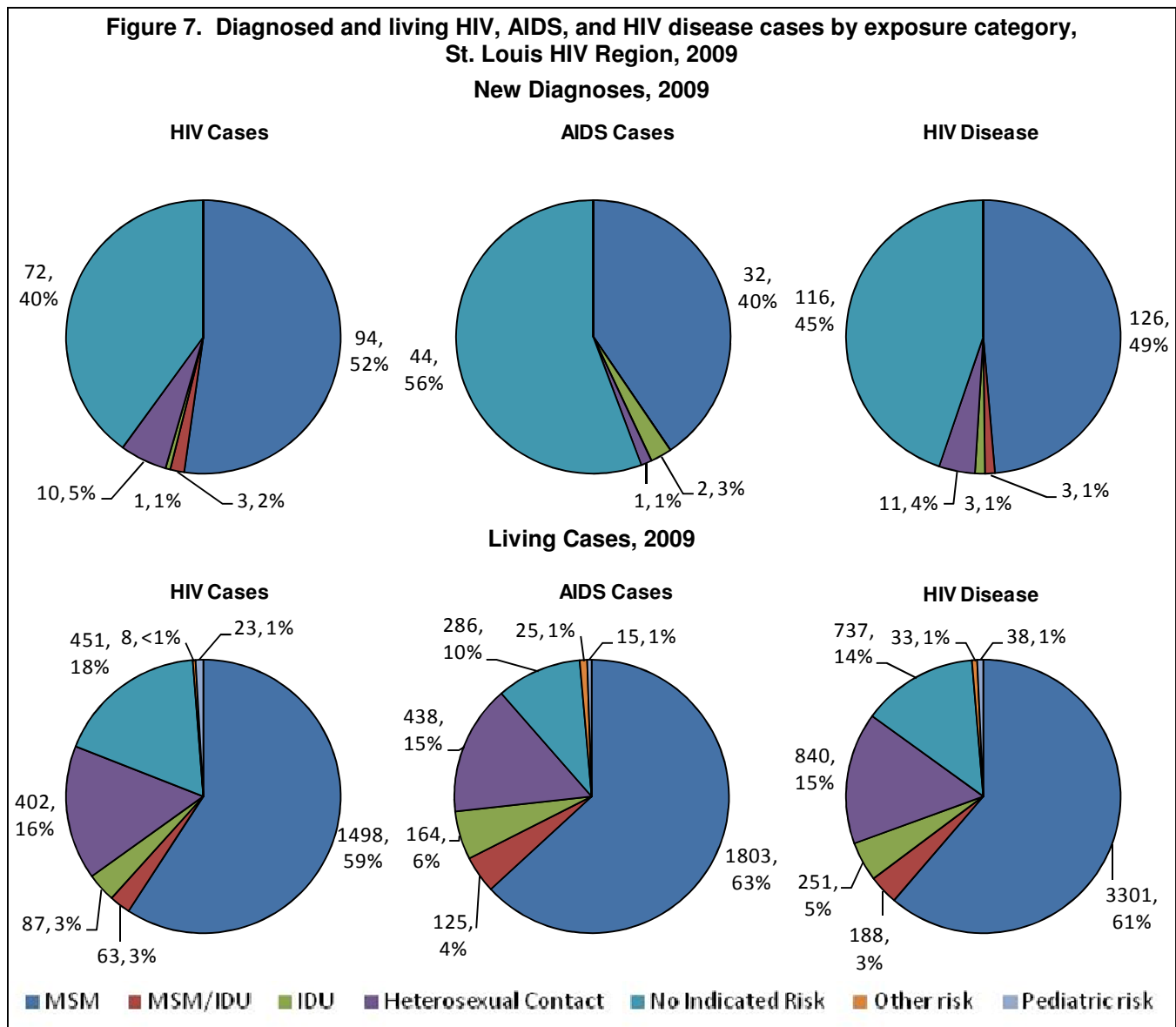
****Per 100,000 population based on 2008 MDHSS estimates.

†Based on age as of December 31, 2009.

Note: Percentages may not total due to rounding.

Of the 5,388 persons living with HIV at the end of 2009, 83% were males (Table 1). The rate of those living with HIV disease was 5.3 times greater among males than females. Blacks represented the largest number of persons living with HIV disease in the St. Louis HIV region. In contrast, whites represented the largest number of persons living with HIV disease in all other HIV regions. The rate of persons living with HIV disease was 4.6 times greater among blacks than whites. The rate was 1.7 times greater among Hispanics than whites. Among males, the rate of individuals living with HIV disease was 4.2 times greater for blacks than whites, and 1.4 times greater for Hispanics than whites. Among females, the rate of those living with HIV disease was 12.2 times greater among blacks than whites, and 4.2 times greater among Hispanics than whites.

Of the 259 persons newly diagnosed with HIV disease in 2009, 31% were classified as AIDS cases by the end of 2009 (Table 2). The rate of new HIV disease diagnoses was 5.0 times greater in males than females. Blacks represented a greater proportion of the new AIDS cases compared to new HIV cases. The rate of new HIV disease cases was 7.4 times greater among blacks than whites, and 2.4 times greater among Hispanics than whites. The disproportionate impact of HIV disease on minorities appears to be greater for new diagnoses compared to those currently living with the disease in the St. Louis HIV region.



Among all categories, the largest proportion of cases with a known risk was attributed to MSM (Figure 7). The large proportion of cases with no indicated risk made trends difficult to interpret for all categories. The surveillance program examined methods to improve the identification and reporting of exposure category information.

Table 3. New and living HIV and AIDS cases and rates, by geographic area, St. Louis HIV Region, 2009												
Geographic Area	HIV Cases						AIDS Cases					
	Diagnosed 2009*			Living			Diagnosed 2009**			Living		
	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***
St. Louis City	89	49.4%	25.1	1,530	60.4%	431.8	38	48.1%	10.7	1,751	61.3%	494.1
St. Louis County	68	37.8%	6.9	814	32.1%	82.1	31	39.2%	3.1	901	31.5%	90.8
St. Charles County	13	7.2%	3.7	96	3.8%	27.5	5	6.3%	1.4	94	3.3%	26.9
Remainder of Region	10	5.6%	2.5	92	3.6%	22.9	5	6.3%	1.2	110	3.9%	27.3
ST LOUIS HIV REGION TOTAL	180	100.0%	8.6	2,532	100.0%	120.7	79	100.0%	3.8	2,856	100.0%	136.1

*HIV cases diagnosed and reported to the Department during 2009 which remained HIV cases at the end of the year.
 **Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.
 ***Per 100,000 population based on 2008 MDHSS estimates.
 Note: Percentages may not total due to rounding.

Table 4. Diagnosed HIV cases and rates, by selected race/ethnicity, by geographic area, St. Louis HIV Region, 2009												
Area	White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Total**		
	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*
St. Louis City	28	31.5%	17.6	54	60.7%	31.4	4	4.5%	38.9	89	100.0%	25.1
St. Louis County	14	20.6%	2.0	53	77.9%	24.7	0	0.0%	0.0	68	100.0%	6.9
St. Charles County	7	53.8%	2.2	4	30.8%	27.6	1	7.7%	12.1	13	100.0%	3.7
Remainder of Region	9	90.0%	2.3	1	10.0%	17.1	0	0.0%	0.0	10	100.0%	2.5
ST LOUIS HIV REGION TOTAL	58	32.2%	3.7	112	62.2%	27.5	5	0.0%	10.6	180	100.0%	8.6

*Per 100,000 population based on 2008 MDHSS estimates.
 **Includes cases in persons whose race/ethnicity is either unknown or not listed.
 Note: Row percentages are shown. Percentages may not total due to rounding.

Table 5. Diagnosed AIDS cases and rates, by selected race/ethnicity, by geographic area, St. Louis HIV Region, 2009												
Area	White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Total**		
	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*
St. Louis City	11	28.9%	6.9	27	71.1%	15.7	0	0.0%	0.0	38	100.0%	10.7
St. Louis County	6	19.4%	0.8	23	74.2%	10.7	1	0.0%	4.4	31	100.0%	3.1
St. Charles County	4	80.0%	1.3	1	20.0%	6.9	0	0.0%	0.0	5	100.0%	1.4
Remainder of Region	5	100.0%	1.3	0	0.0%	0.0	0	0.0%	0.0	5	100.0%	1.2
ST LOUIS HIV REGION TOTAL	26	32.9%	1.7	51	64.6%	12.5	1	0.0%	2.1	79	100.0%	3.8

*Per 100,000 population based on 2008 MDHSS estimates.
 **Includes cases in persons whose race/ethnicity is either unknown or not listed.
 Note: Row percentages are shown. Percentages may not total due to rounding.

The rates of new diagnoses and living cases were higher in St. Louis City compared to other areas in the St. Louis HIV region (Table 3).

There were differences in the proportion of new HIV cases diagnosed by race/ethnicity among the geographic areas (Table 4). Greater proportions of the new HIV cases diagnosed in St. Louis City and St. Louis County were black compared to St. Charles County and the remainder of the HIV region.

There were also differences in the proportion of new AIDS cases diagnosed by race/ethnicity among the geographic areas (Table 5). The proportion of newly diagnosed AIDS cases that occurred among blacks was higher for St. Louis City and St. Louis County compared to St. Charles County.

Table 6. Newly diagnosed and living HIV and AIDS cases in men who have sex with men, by selected race/ethnicity, St. Louis HIV Region, 2009

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	31	33.0%	776	51.8%	14	43.8%	961	53.3%
Black	56	59.6%	656	43.8%	16	50.0%	791	43.9%
Hispanic	3	3.2%	44	2.9%	1	3.1%	33	1.8%
Other/Unknown	4	4.3%	22	1.5%	1	3.1%	18	1.0%
ST LOUIS HIV REGION TOTAL	94	100.0%	1,498	100.0%	32	100.0%	1,803	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

Note: Percentages may not total due to rounding.

Table 7. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by current age group, St. Louis HIV Region, 2009

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
13-18	0	0.0%	11	0.8%	0	0.0%	11	0.3%
19-24	23	1.3%	117	8.1%	1	1.3%	143	4.3%
25-44	587	33.8%	700	48.4%	48	62.3%	1,354	41.0%
45-64	1,021	58.8%	581	40.2%	25	32.5%	1,646	49.9%
65+	106	6.1%	38	2.6%	3	3.9%	147	4.5%
ST LOUIS HIV REGION TOTAL	1,737	100.0%	1,447	100.0%	77	100.0%	3,301	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 8. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by geographic area, St. Louis HIV Region, 2009

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	1,035	50.5%	949	46.3%	36	1.8%	2,048	62.0%
St. Louis County	529	50.4%	473	45.1%	38	3.6%	1,049	31.8%
St. Charles County	89	80.9%	16	14.5%	2	1.8%	110	3.3%
Remaining Counties	84	89.4%	9	9.6%	1	1.1%	94	2.8%
ST LOUIS HIV REGION TOTAL	1,737	52.6%	1,447	43.8%	77	2.3%	3,301	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race/ethnicity in each area.

***Percentage of cases per area.

Note: Percentages may not total due to rounding.

There were a total of 126 new HIV disease diagnoses attributed to men who have sex with men (MSM) in 2009 for the St. Louis HIV region (Table 6). Blacks represented the greatest proportion of new HIV and AIDS cases diagnosed in 2009 among MSM. Of the newly diagnosed cases among MSM, 25% progressed to AIDS by the end of 2009. Among MSM living with HIV disease, whites represented the largest proportion of living HIV and AIDS cases.

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM (Table 7). Among white MSM living with HIV disease, the majority (59%) were between 45-64 years of age at the end of 2009. In contrast, the greatest proportions of black (48%) and Hispanic (62%) MSM living with HIV disease were between 25-44 years of age.

There were differences in the distribution of persons living with HIV disease by race/ethnicity among the geographic areas for MSM (Table 8). Black MSM comprised a larger proportion of persons living with HIV disease in St. Louis City and St. Louis County compared to other areas.

Table 9. Newly diagnosed and living HIV and AIDS cases in men who have sex with men and inject drugs, by selected race/ethnicity, St. Louis HIV Region, 2009

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	2	66.7%	28	44.4%	0	--	63	50.4%
Black	0	0.0%	31	49.2%	0	--	62	49.6%
Hispanic	1	33.3%	3	4.8%	0	--	0	0.0%
Other/Unknown	0	0.0%	1	1.6%	0	--	0	0.0%
ST LOUIS HIV REGION TOTAL	3	100.0%	63	100.0%	0	--	125	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

Note: Percentages may not total due to rounding.

Table 10. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity, by current age group, St. Louis HIV Region, 2009

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	1	1.1%	1	1.1%	1	33.3%	3	1.6%
25-44	29	31.9%	29	31.2%	2	66.7%	60	31.9%
45-64	55	60.4%	60	64.5%	0	0.0%	116	61.7%
65+	6	6.6%	3	3.2%	0	0.0%	9	4.8%
ST LOUIS HIV REGION TOTAL	91	100.0%	93	100.0%	3	100.0%	188	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 11. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity, by geographic area, St. Louis HIV Region, 2009

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	53	41.7%	71	55.9%	2	1.6%	127	67.6%
St. Louis County	27	57.4%	20	42.6%	0	0.0%	47	25.0%
St. Charles County	6	75.0%	1	12.5%	1	12.5%	8	4.3%
Remaining Counties	5	83.3%	1	16.7%	0	0.0%	6	3.2%
ST LOUIS HIV REGION TOTAL	91	48.4%	93	49.5%	3	1.6%	188	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race/ethnicity in each area.

***Percentage of cases per area.

Note: Percentages may not total due to rounding.

There were a total of three new HIV disease diagnoses attributed to men who have sex with men and inject drugs (MSM/IDU) in 2009 for the St. Louis HIV region (Table 9). There were 188 living HIV disease cases attributed to MSM/IDU at the end of 2009 in the St. Louis HIV region. The number of living HIV and AIDS cases among MSM/IDU was similar between blacks and whites.

The majority of persons living with HIV disease among both white and black MSM/IDU were 45-64 years old at the end of 2009 (Table 10).

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for MSM/IDU (Table 11). Black MSM/IDU comprised a larger proportion of living cases in St. Louis City and St. Louis County compared to other areas.

Table 12. Newly diagnosed and living HIV and AIDS cases in injecting drug users, by selected race/ethnicity and sex, St. Louis HIV Region, 2009

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	0.0%	21	24.1%	0	0.0%	29	17.7%
Black Male	1	100.0%	38	43.7%	1	50.0%	72	43.9%
Hispanic Male	0	0.0%	0	0.0%	0	0.0%	2	1.2%
White Female	0	0.0%	15	17.2%	0	0.0%	16	9.8%
Black Female	0	0.0%	12	13.8%	1	50.0%	43	26.2%
Hispanic Female	0	0.0%	0	0.0%	0	0.0%	1	0.6%
ST LOUIS HIV REGION TOTAL[†]	1	100.0%	87	100.0%	2	100.0%	164	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

Table 13. Living HIV disease cases in injecting drug users, by selected race/ethnicity, by current age group, St. Louis HIV Region, 2009

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	1	3.2%	0	0.0%	1	0.4%
25-44	19	38.0%	23	20.9%	15	48.4%	20	36.4%	79	31.5%
45-64	29	58.0%	80	72.7%	15	48.4%	31	56.4%	157	62.5%
65+	2	4.0%	7	6.4%	0	0.0%	4	7.3%	14	5.6%
ST LOUIS HIV REGION TOTAL	50	100.0%	110	100.0%	31	100.0%	55	100.0%	251	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 14. Living HIV disease cases in injecting drug users, by selected race/ethnicity, by geographic area, St. Louis HIV Region, 2009

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	28	17.0%	134	81.2%	2	1.2%	165	65.7%
St. Louis County	22	40.7%	30	55.6%	1	1.9%	54	21.5%
St. Charles County	12	92.3%	1	7.7%	0	0.0%	13	5.2%
Remaining Counties	19	100.0%	0	0.0%	0	0.0%	19	7.6%
ST LOUIS HIV REGION TOTAL	81	32.3%	165	65.7%	3	1.2%	251	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race/ethnicity in each area.

***Percentage of cases per area.

Note: Percentages may not total due to rounding.

There were a total of three new HIV disease diagnoses attributed to injecting drug users (IDU) in 2009 for the St. Louis HIV region (Table 12). There were 251 persons living with HIV disease attributed to IDU at the end of 2009 in the St. Louis HIV region. Black males represented the largest proportion of living HIV and AIDS cases.

The distribution of living HIV disease cases by current age varied by race/ethnicity and sex among IDU (Table 13). Among white males, black males, and black females, the greatest proportion of living cases was 45-64 years of age at the end of 2009. Among white females, an equal number of persons living with HIV disease were between 25-44 and 45-64 years of age.

There were differences in the distribution of individuals living with HIV disease by race/ethnicity among the geographic areas for IDU (Table 14). St. Louis City had the largest proportion of black IDU living with HIV disease (81%). St. Louis County had the second largest proportion of black IDU living with HIV disease (56%).

Table 15. Newly diagnosed and living HIV and AIDS cases in heterosexual contacts, by selected race/ethnicity and sex, St. Louis HIV Region, 2009

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	0.0%	26	6.5%	0	0.0%	27	6.2%
Black Male	0	0.0%	71	17.7%	0	0.0%	100	22.8%
Hispanic Male	0	0.0%	1	0.2%	0	0.0%	3	0.7%
White Female	2	20.0%	73	18.2%	0	0.0%	59	13.5%
Black Female	8	80.0%	219	54.5%	1	100.0%	239	54.6%
Hispanic Female	0	0.0%	7	1.7%	0	0.0%	5	1.1%
ST LOUIS HIV REGION TOTAL[†]	10	100.0%	402	100.0%	1	100.0%	438	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

Table 16. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and sex, by current age group, St. Louis HIV Region, 2009

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	3	0.7%	3	0.4%
19-24	0	0.0%	4	2.3%	1	0.8%	8	1.7%	13	1.5%
25-44	11	20.8%	81	47.4%	71	53.8%	289	63.1%	468	55.7%
45-64	32	60.4%	72	42.1%	53	40.2%	145	31.7%	310	36.9%
65+	10	18.9%	14	8.2%	7	5.3%	13	2.8%	46	5.5%
ST LOUIS HIV REGION TOTAL	53	100.0%	171	100.0%	132	100.0%	458	100.0%	840	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 17. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity, by geographic area, St. Louis HIV Region, 2009

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	74	14.6%	420	82.8%	9	1.8%	507	60.4%
St. Louis County	68	24.5%	200	71.9%	5	1.8%	278	33.1%
St. Charles County	14	66.7%	5	23.8%	1	4.8%	21	2.5%
Remaining Counties	29	85.3%	4	11.8%	1	2.9%	34	4.0%
ST LOUIS HIV REGION TOTAL	185	22.0%	629	74.9%	16	1.9%	840	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race in each area.

***Percentage of cases per area.

Note: Percentages may not total due to rounding.

There were a total of 11 new HIV disease diagnoses attributed to heterosexual contact in 2009 for the St. Louis HIV region (Table 15). All of the newly diagnosed persons were females. There were 840 persons living with HIV disease attributed to heterosexual contact at the end of 2009 in the St. Louis HIV region. Black females represented the largest proportion of both living HIV and AIDS cases among heterosexual contact cases.

At the end of 2009, the greatest proportions of heterosexual contact cases living with HIV disease were between 25-44 years of age for white females, black males, and black females (Table 16). Among white males, the greatest proportion of individuals living with HIV disease was between 45-64 years of age.

There were differences in the distribution of individuals living with HIV disease by race/ethnicity among the geographic areas for heterosexual contact cases (Table 17). Black heterosexual contact cases comprised a larger proportion of living cases in St. Louis City and St. Louis County compared to other areas.

Table 18. Newly diagnosed and living HIV and AIDS cases with exposure category assignments for St. Louis HIV Region, 2009

Exposure category	HIV cases				AIDS cases			
	2009*		Living		2009**		Living	
Adult/Adolescent								
Men who have sex with men	143	79.4%	1,770	70.5%	62	78.5%	1,985	69.9%
Men who have sex with men and inject drugs	4	2.2%	75	3.0%	0	0.0%	137	4.8%
Injecting drug use	2	1.1%	108	4.3%	8	10.1%	186	6.5%
Heterosexual contact	31	17.2%	547	21.8%	9	11.4%	507	17.8%
Hemophilia/coagulation disorder	0	0.0%	7	0.3%	0	0.0%	26	0.9%
Blood transfusion or tissue recipient	0	0.0%	1	0.0%	0	0.0%	0	0.0%
No indicated risk (NIR)	-----	-----	-----	-----	-----	-----	-----	-----
ADULT/ADOLESCENT SUBTOTAL	180	100.0%	2,509	† 100.0%	79	100.0%	2,841	100.0%
Pediatric (<13 years old)								
PEDIATRIC SUBTOTAL	0	0.0%	23	100.0%	0	0.0%	15	100.0%
TOTAL	180		2,532		79		2,856	

*HIV cases reported during 2009 which remained HIV cases at the end of the year.

**Does not include HIV cases that progressed to AIDS.

†Includes 1 case with a confirmed "other" exposure category.

Note: Percentages may not total due to rounding.

The data in Table 18 have been adjusted to proportionately re-distribute individuals with no indicated risk factor based on sex and race/ethnicity to known exposure categories. These data do not reflect the true counts of persons reported in each exposure category. Among both new and living HIV and AIDS cases, MSM represented the greatest proportion of cases. The proportion of diagnoses attributed to MSM was greater for new HIV case diagnoses compared to the proportion among living HIV cases. No diagnoses were reported among children less than 13 years of age in 2009 in the St. Louis HIV region.

Figure 8. Reported P&S syphilis cases, by race and sex, by age group at diagnosis, St. Louis Region, 2009

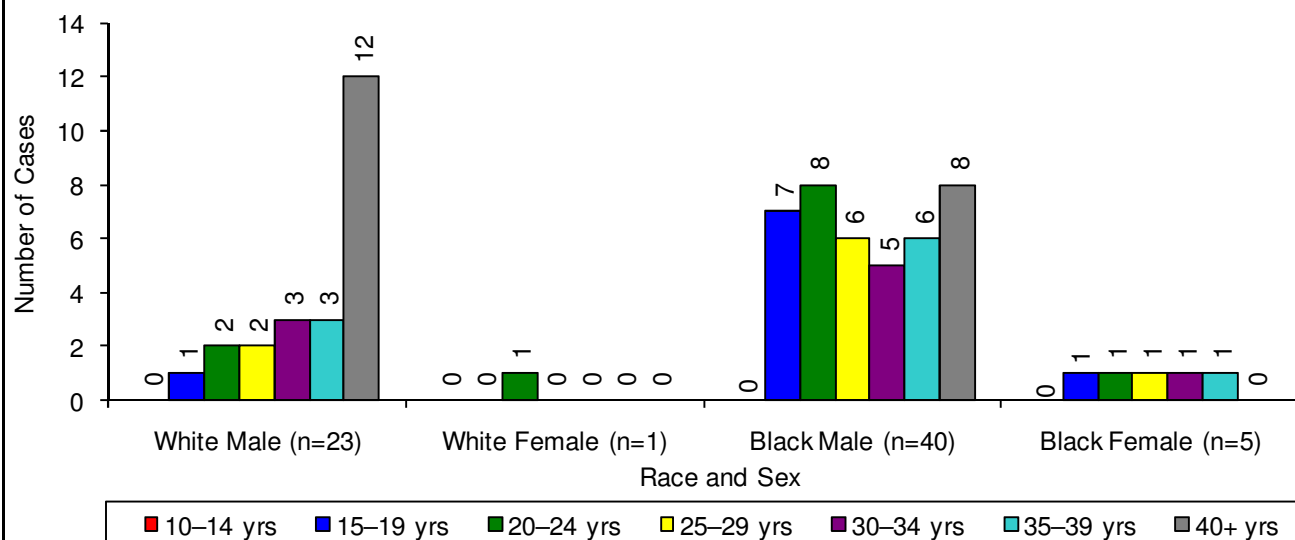
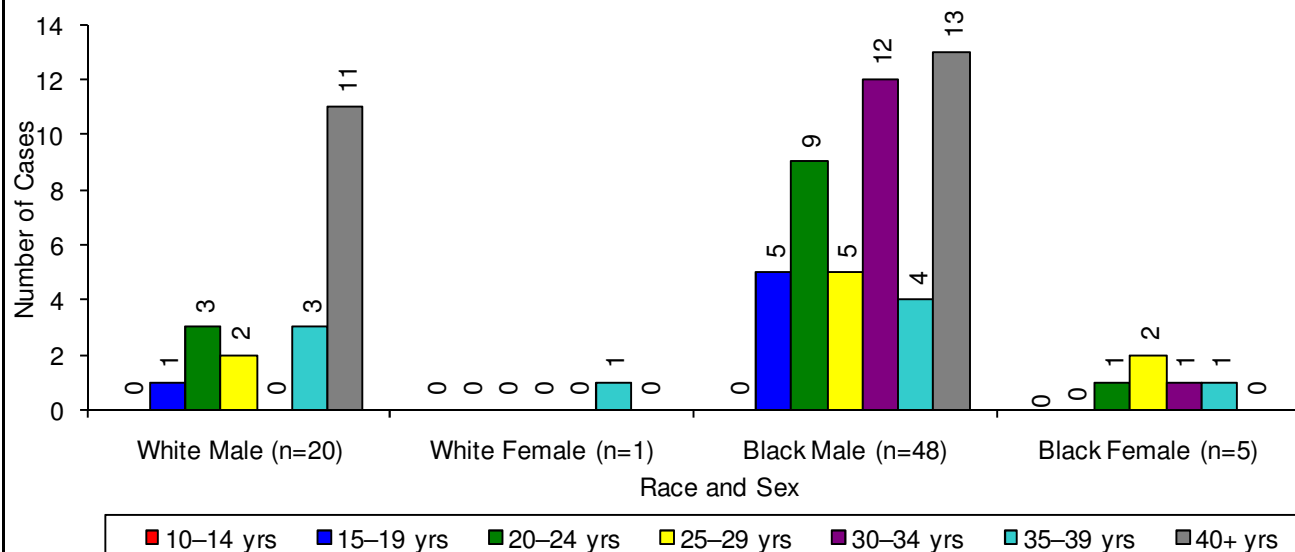
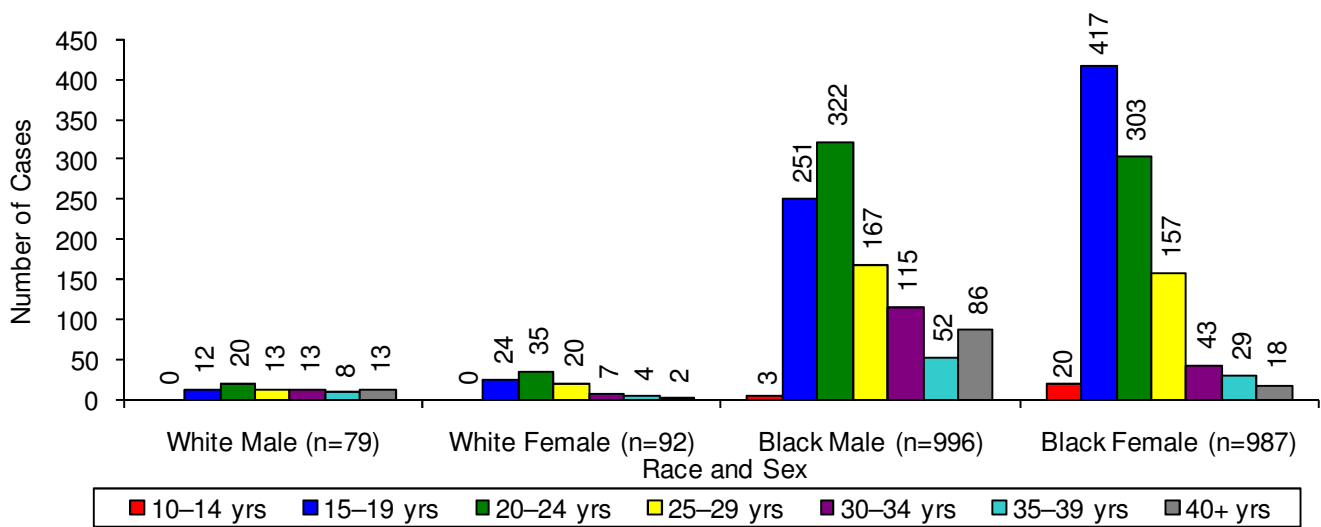


Figure 9. Reported early latent syphilis cases, by race and sex, by age group at diagnosis, St. Louis Region, 2009

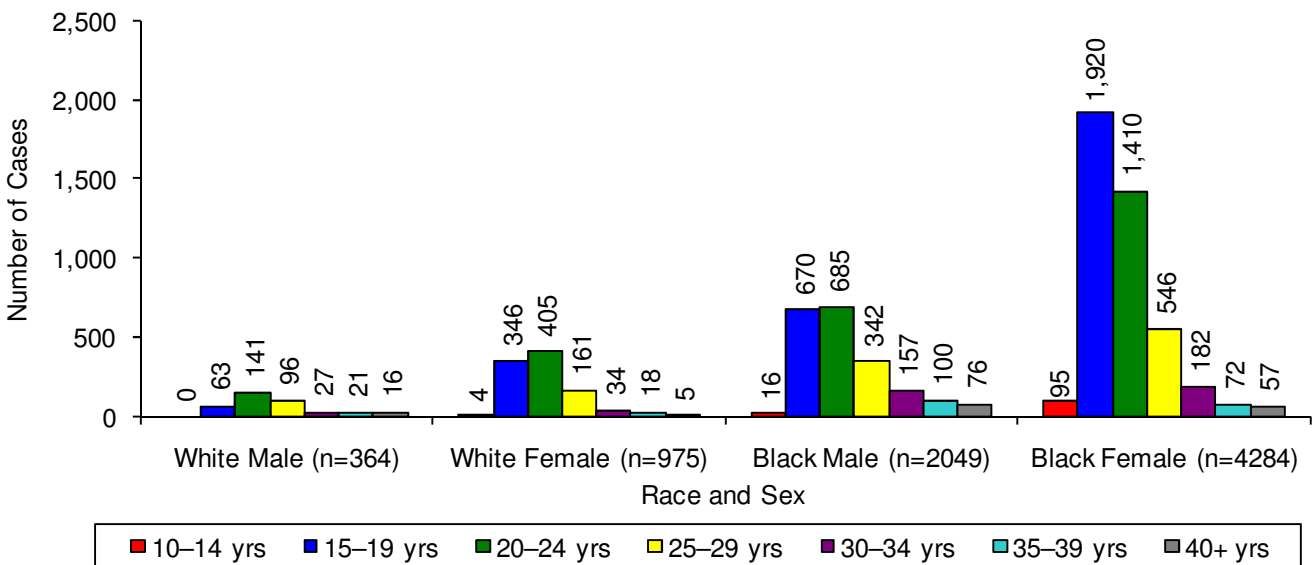


The largest number of P&S syphilis cases was reported among black males (40), followed by white males (23) (Figure 8). The number of reported cases decreased from 2008 to 2009 among all race/ethnicity and sex categories presented. There were differences in the distribution of reported cases by age at diagnosis among the race/ethnicity and sex categories. A greater proportion of diagnoses were 40 or more years old (52%) among white males compared to the other race/ethnicity and sex categories presented.

The largest number of early latent syphilis cases was reported among black males (48), followed by white males (20) (Figure 9). The number of reported early latent syphilis cases increased from 2008 to 2009 among white males (18 to 20) and black males (30 to 48), and decreased among black females (8 to 5) and white females (2 to 1). Among white males, individuals 40 or more years of age represented majority of diagnoses. Among black males, a nearly equal number of cases was reported among individuals 30-34 and individuals 40 or more years of age.

Figure 10. Reported gonorrhea cases, by race and sex, by age group at diagnosis, St. Louis Region, 2009

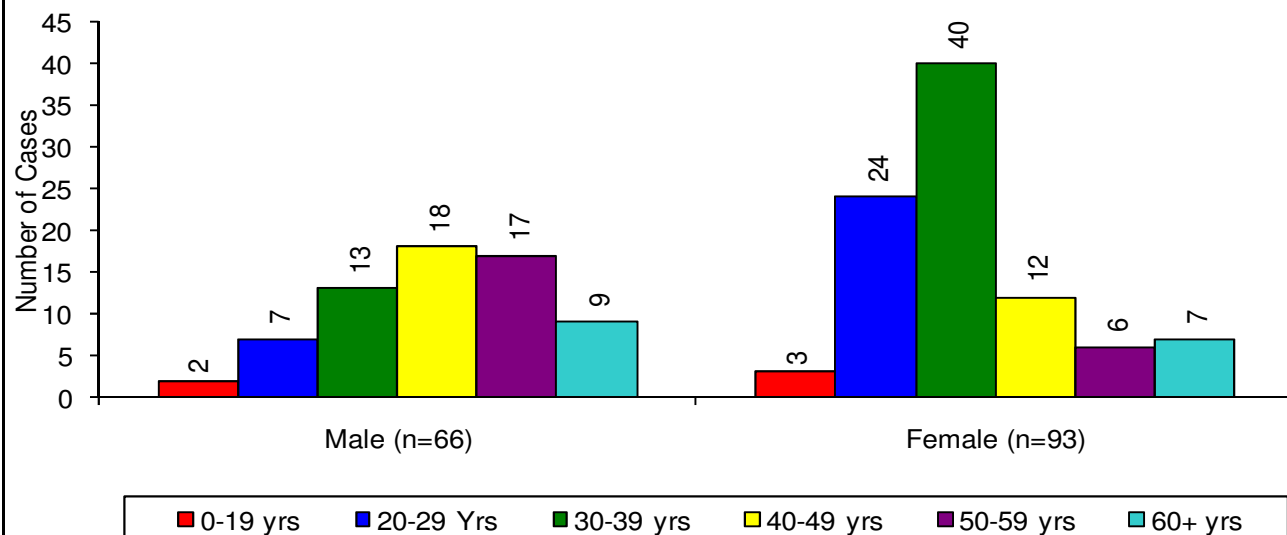
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

Figure 11. Reported chlamydia cases, by race and sex, by age group at diagnosis, St. Louis Region, 2009

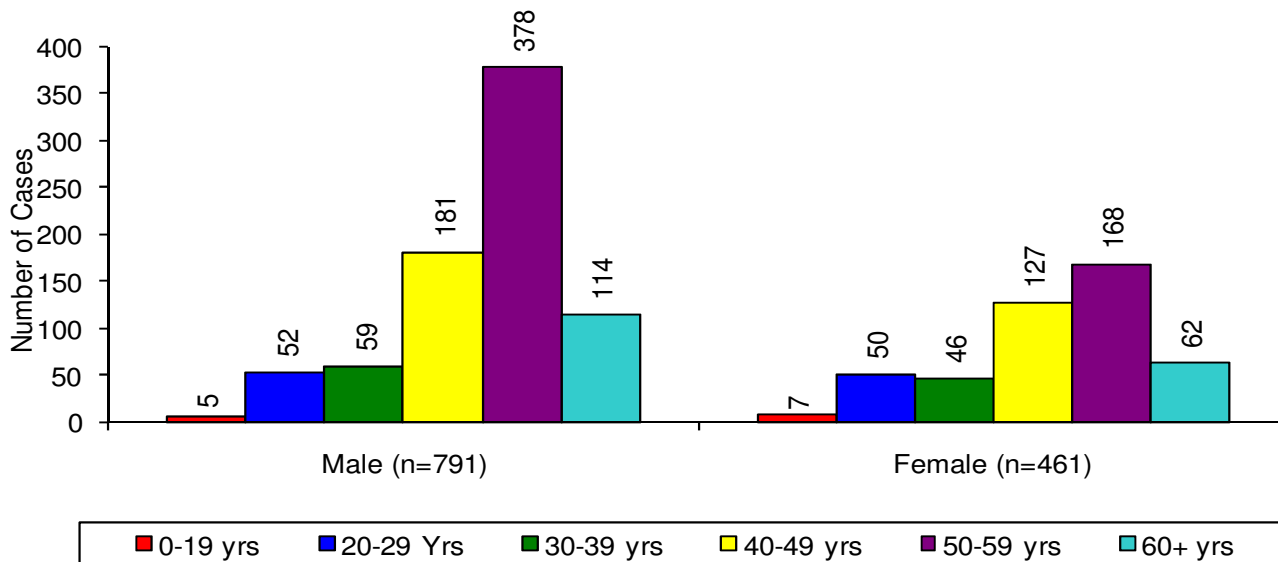
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

The largest number of gonorrhea cases was reported among black males (996), followed by black females (987) (Figure 10). The number of reported cases decreased from 2008 to 2009 among all race/ethnicity and sex categories presented. Among black females, the largest numbers of gonorrhea cases were reported among those 15-19 years of age. The largest number of cases was diagnosed between 20-24 years of age among white females, white males, and black males.

The largest number of chlamydia cases was reported among black females (4,284), followed by black males (2,049). The number of reported chlamydia cases increased from 2008 to 2009 among all race/ethnicity and sex categories presented. Among black females, individuals 15-19 years of age represented the largest number of reported cases. For all other race/ethnicity and sex categories presented, 20-24 years olds represented the largest number of diagnosed cases.

Figure 12. Reported Hepatitis B cases, by sex and by age group at diagnosis, St. Louis Region, 2009

Note: Totals include persons whose age at diagnosis is unknown.

Figure 13. Reported Hepatitis C cases, by sex and by age group at diagnosis, St. Louis Region, 2009

Note: Totals include persons whose age at diagnosis is unknown.

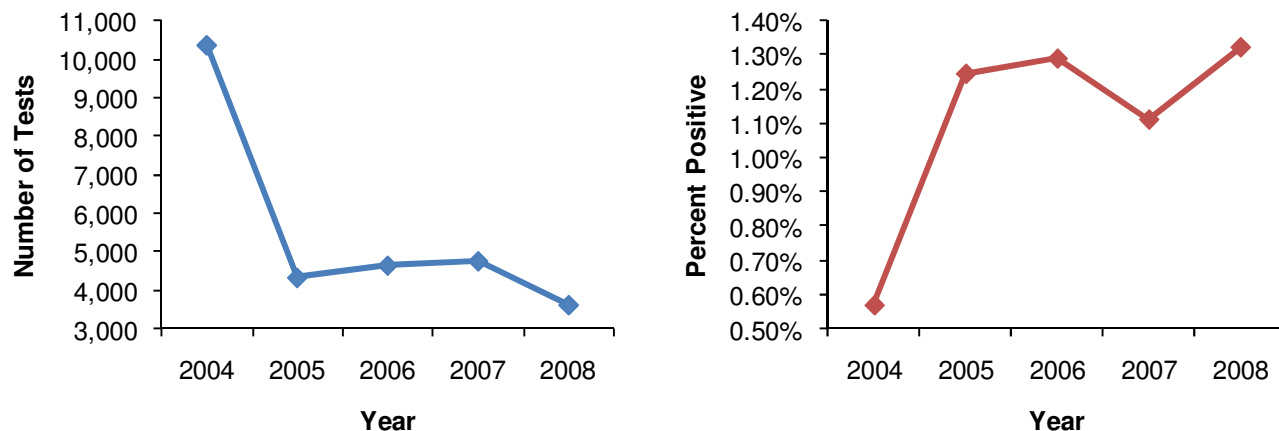
There were 159 reported cases of Hepatitis B in the St. Louis HIV region during 2009 (Figure 12). Females represented 58% of reported Hepatitis B cases. There were differences in the age distribution of reported Hepatitis B cases by sex. Among males, the largest proportion of cases was between 40-49 years of age at diagnosis. The largest proportion of cases was 30-39 years old among females.

In 2009, there were 1,252 Hepatitis C cases reported in the St. Louis HIV region (Figure 13). Of the reported Hepatitis C cases, 63% were male. Among both males and females the largest numbers of cases were reported among persons 50-59 years of age at diagnosis, and the second largest numbers of cases were reported among those 40-49 years of age.

Table 19. Number of HIV tests* and positive tests among counseling, testing and referral program sites, by current gender, race/ethnicity, age, exposure category, and test method, St. Louis HIV Region, 2008			
	Total Tests N	Positive Tests N	%
Total	3,631	48	1.3%
Current Gender			
Male	2,246	41	1.8%
Female	1,381	7	0.5%
Transgender	3	0	0.0%
Unknown	1	0	0.0%
Race/Ethnicity			
White	779	10	1.3%
Black	2,673	36	1.3%
Hispanic	72	1	1.4%
Other/Unknown	107	1	0.9%
Age at Test			
<13	1	0	0.0%
13-18	274	3	1.1%
19-24	772	9	1.2%
25-44	1,747	29	1.7%
45-64	768	7	0.9%
65+	44	0	0.0%
Unknown	25	0	0.0%
Exposure Category			
MSM	491	27	5.5%
MSM/IDU	9	2	22.2%
IDU	84	0	0.0%
Heterosexual Contact**	111	2	1.8%
Presumed Heterosexual Contact***	1,098	5	0.5%
Unknown	1,838	12	0.7%
Test Method			
Rapid	1,586	26	1.6%
Conventional	2,040	22	1.1%
Unknown	5	0	0.0%
*Includes only tests where a result was available and where the individual did not self-report a previously positive HIV test and reported residing in the St. Louis HIV Region.			
**Includes males and females who reported no injection drug use and reported high risk heterosexual behaviors with the opposite gender; corresponds with the CDC definition of high risk heterosexual contact.			
***Includes females who reported no history of injection drug use and reported sex with males without additional risk behaviors.			
Source: Missouri Counseling and Testing data			

Table 19 presents testing characteristics only among those tests performed at MDHSS counseling and testing sites among persons residing in the St. Louis HIV region where the results were available and for tests where the individual did not report a previously positive HIV test; there were 3,631 tests that met these criteria. Overall, slightly more than one percent of tests were positive for HIV disease.

The number of tests decreased from 2004-2005 and then fluctuated slightly from 2005-2008 among residents in the St. Louis HIV region (Figure 16). The decrease in the number of tests seen from 2004-2005 was likely due to the switch in STD public health care providers. HIV testing reports from the new STD public health provider beginning in 2005 were likely not complete.

Figure 14. Number of HIV tests and percent positive results at Missouri counseling and testing sites, St. Louis HIV Region, 2004-2008

Source: Missouri Counseling and Testing data

There were variations in the distributions of case management enrollment, ADAP enrollment, and persons living with HIV disease by current gender, race/ethnicity and current age (Table 20). Females, minorities, and persons 25-44 years of age tended to represent a greater proportion of persons enrolled in case management and ADAP compared to all persons living with HIV disease in the region. Differences in demographic information may exist because data regarding persons living with HIV disease were obtained from a different source (eHARS) than information on persons enrolled in case management or ADAP (FACTORS).

Table 20. Demographic characteristics of persons enrolled in HIV medical case management, persons enrolled in ADAP, and persons living with HIV disease, St. Louis HIV Region, 2009

	<u>Enrolled in Case Management</u>		<u>Enrolled in ADAP*</u>		<u>Living HIV Disease</u>	
	N	%	N	%	N	%
Current Gender						
Male	1,961	77.6%	1,256	79.3%	4,463	82.8%
Female	541	21.4%	314	19.8%	908	16.9%
Transgender	25	1.0%	12	0.8%	17	0.3%
Unknown	1	<0.1%	1	<0.1%	0	0.0%
Total	2,528	100.0%	1,583	100.0%	5,388	100.0%
Race/Ethnicity						
White	914	36.2%	559	35.3%	2,353	43.7%
Black	1,529	60.5%	958	60.5%	2,839	52.7%
Hispanic	62	2.5%	50	3.2%	124	2.3%
Asian/Pacific Islander	9	0.4%	8	0.5%	23	0.4%
American Indian/Alaskan Native	5	0.2%	2	0.1%	3	<0.1%
Two or More Races/Unknown	9	0.4%	6	0.4%	46	0.9%
Total	2,528	100.0%	1,583	100.0%	5,388	100.0%
Current Age[‡]						
<13	5	0.2%	1	<0.1%	18	0.3%
13-18	22	0.9%	4	0.3%	33	0.6%
19-24	149	5.9%	117	7.4%	233	4.3%
25-44	1,245	49.2%	875	55.3%	2,334	43.3%
45-64	1,055	41.7%	564	35.6%	2,527	46.9%
65+	52	2.1%	22	1.4%	243	4.5%
Unknown	0	0.0%	0	0.0%	0	0.0%
Total	2,528	100.0%	1,583	100.0%	5,388	100.0%

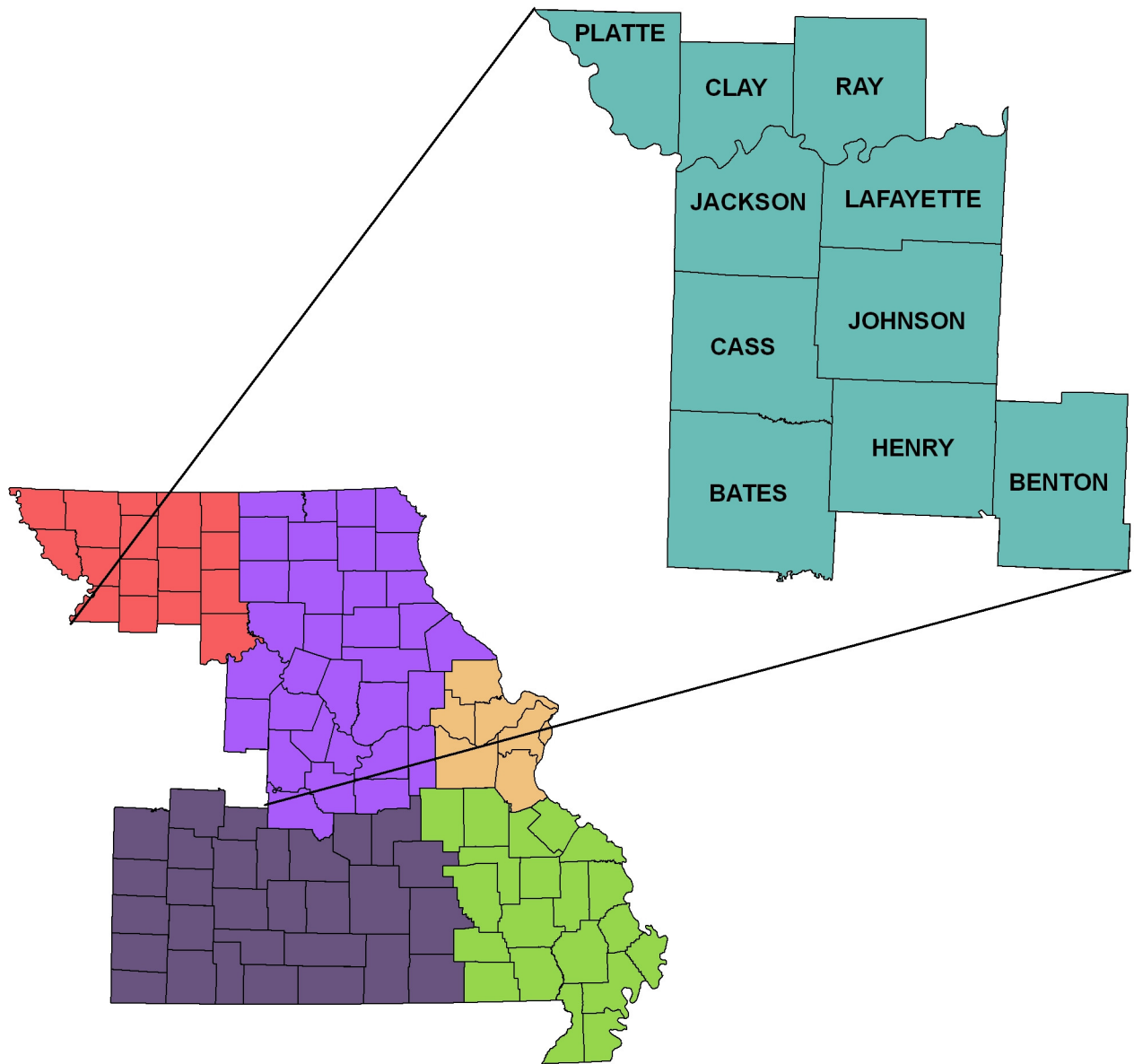
*ADAP=AIDS Drug Assistance Program

‡As of December 31, 2009

Source: FACTORS and eHARS

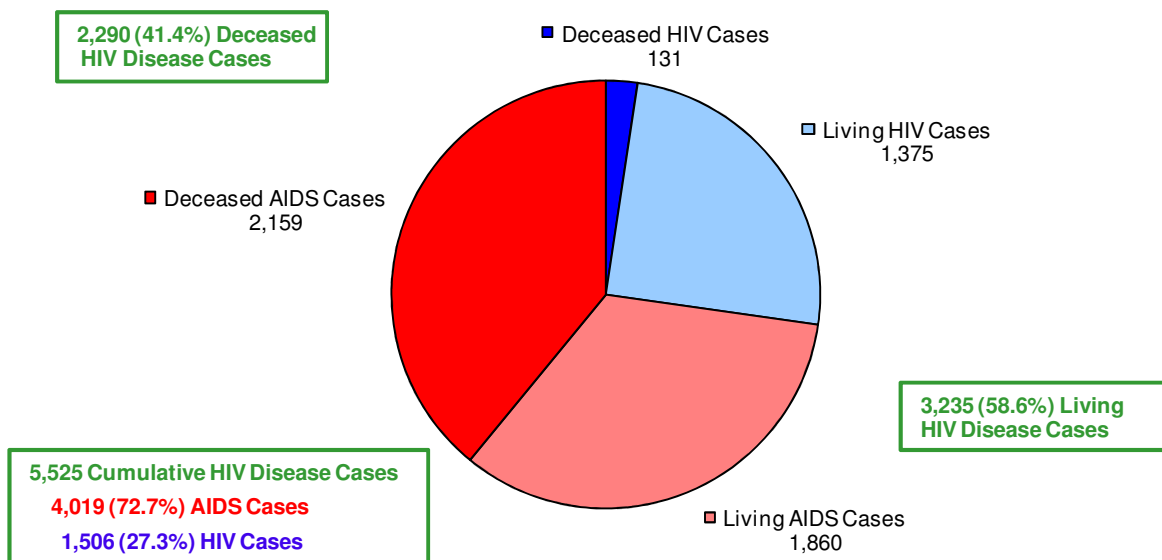
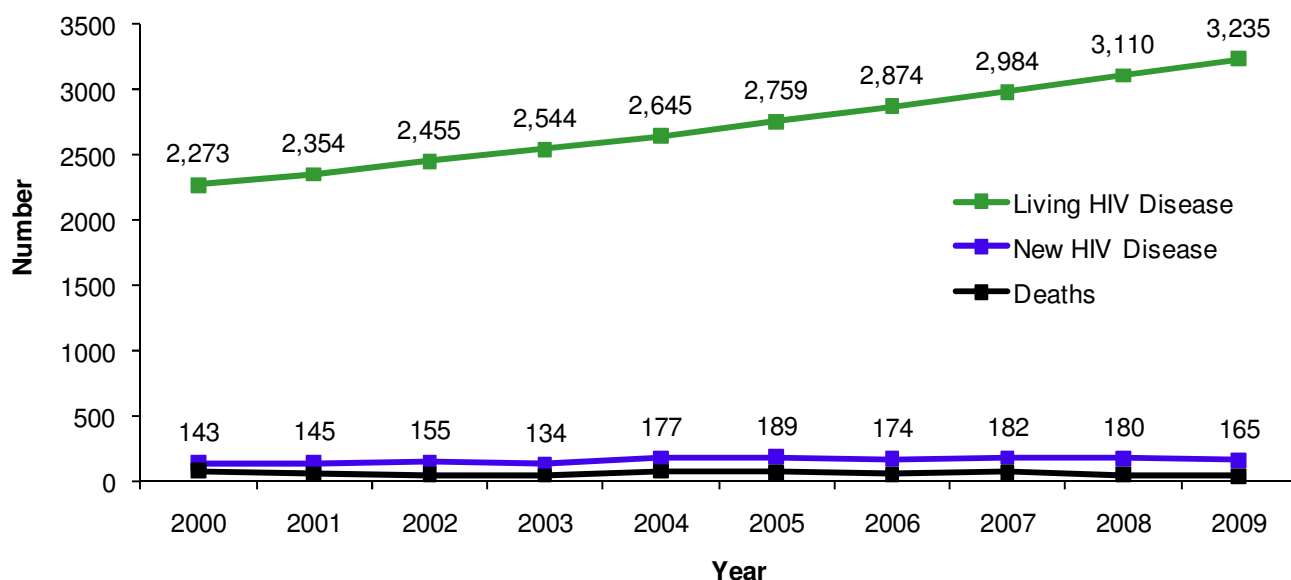
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KANSAS CITY REGION



Population Estimates, Kansas City HIV Region, 2008

County	White		Black		Hispanic		Asian/Pacific Islander		American Indian/Alaskan Native		Two or More Races		Total
Bates County	16,299	95.5%	171	1.0%	277	1.6%	32	0.2%	110	0.6%	186	1.1%	17,075
Benton County	17,637	96.1%	104	0.6%	235	1.3%	24	0.1%	97	0.5%	252	1.4%	18,349
Cass County	88,986	90.4%	3,585	3.6%	3,532	3.6%	595	0.6%	485	0.5%	1,246	1.3%	98,429
Clay County	185,983	86.2%	10,060	4.7%	10,988	5.1%	4,517	2.1%	934	0.4%	3,225	1.5%	215,707
Henry County	21,140	95.3%	249	1.1%	286	1.3%	74	0.3%	171	0.8%	259	1.2%	22,179
Jackson County	441,624	66.1%	148,401	22.2%	52,696	7.9%	10,780	1.6%	3,063	0.5%	11,853	1.8%	668,417
Johnson County	46,033	88.5%	2,005	3.9%	1,761	3.4%	980	1.9%	328	0.6%	909	1.7%	52,016
Lafayette County	31,039	94.3%	787	2.4%	487	1.5%	117	0.4%	95	0.3%	388	1.2%	32,913
Platte County	74,837	87.1%	4,144	4.8%	3,680	4.3%	1,588	1.8%	360	0.4%	1,287	1.5%	85,896
Ray County	22,289	95.1%	387	1.7%	327	1.4%	61	0.3%	94	0.4%	287	1.2%	23,445
Region Total	945,867	76.6%	169,893	13.8%	74,269	6.0%	18,768	1.5%	5,737	0.5%	19,892	1.6%	1,234,426

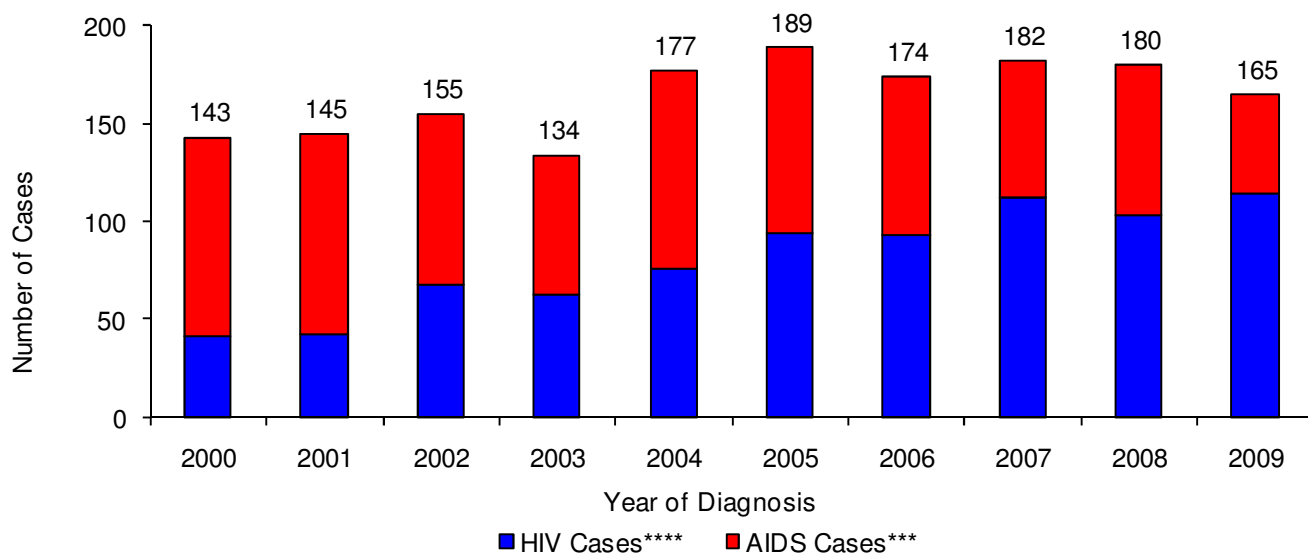
Figure 1. HIV disease cases (living and deceased), by current HIV vs. AIDS status, Kansas City HIV Region, 1982—2009**Figure 2. Living and new HIV disease cases and deaths by year*, Kansas City HIV Region, 2000—2009**

*For living HIV disease cases-the number of individuals living with HIV disease at the end of the year; For new HIV disease cases-the number of individuals newly diagnosed in the year, For HIV disease deaths-the number of individuals that died in the year.

From 1982 to 2009, there have been a total of 5,525 HIV disease cases diagnosed in the Kansas City HIV region and reported to MDHSS (Figure 1). Of the cumulative cases reported, 59% were still presumed to be living with HIV disease at the end of 2009. Among those living with HIV disease, 1,375 were classified as HIV cases at the end of 2009 and 1,860 were classified as AIDS cases.

At the end of 2009, there were 3,235 persons living with HIV disease whose most recent diagnosis occurred in the Kansas City HIV region (Figure 2). The number of people living with HIV disease increased every year. There were 165 new HIV disease diagnoses in 2009. The median number of new diagnoses was greater for 2005-2009 compared to 2000-2004. The number of deaths among persons with HIV disease remained generally stable.

Figure 3. HIV disease cases, by current status* and year of diagnosis, Kansas City HIV Region, 2000—2009**



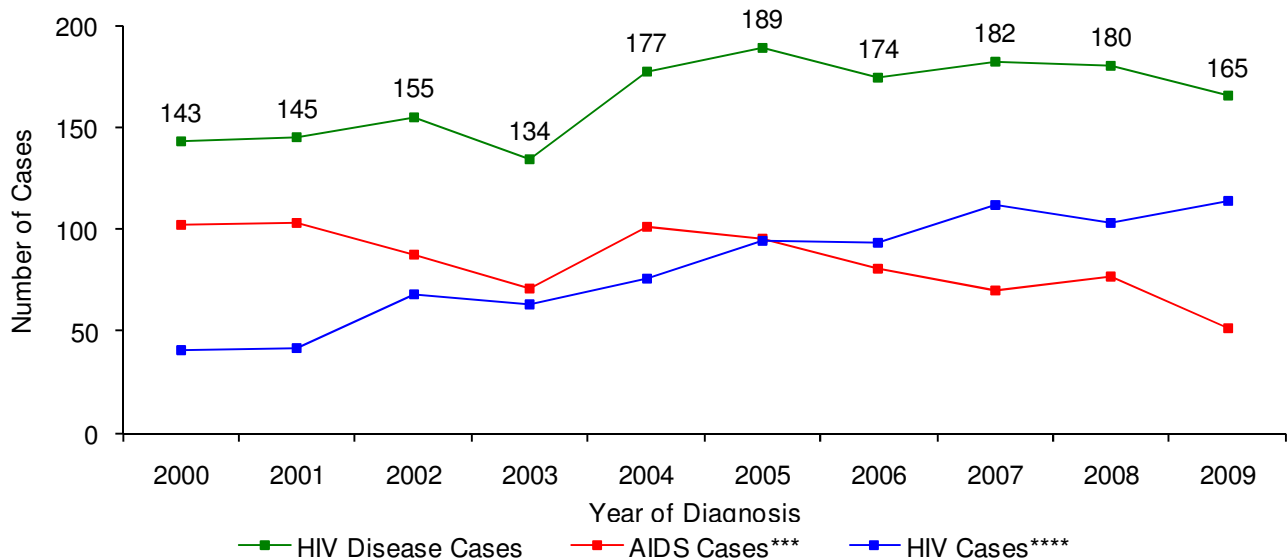
*HIV case vs. AIDS case

**Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2009.

Figure 4. Reported HIV disease cases, by current status* and year of diagnosis, Kansas City HIV Region, 2000—2009**



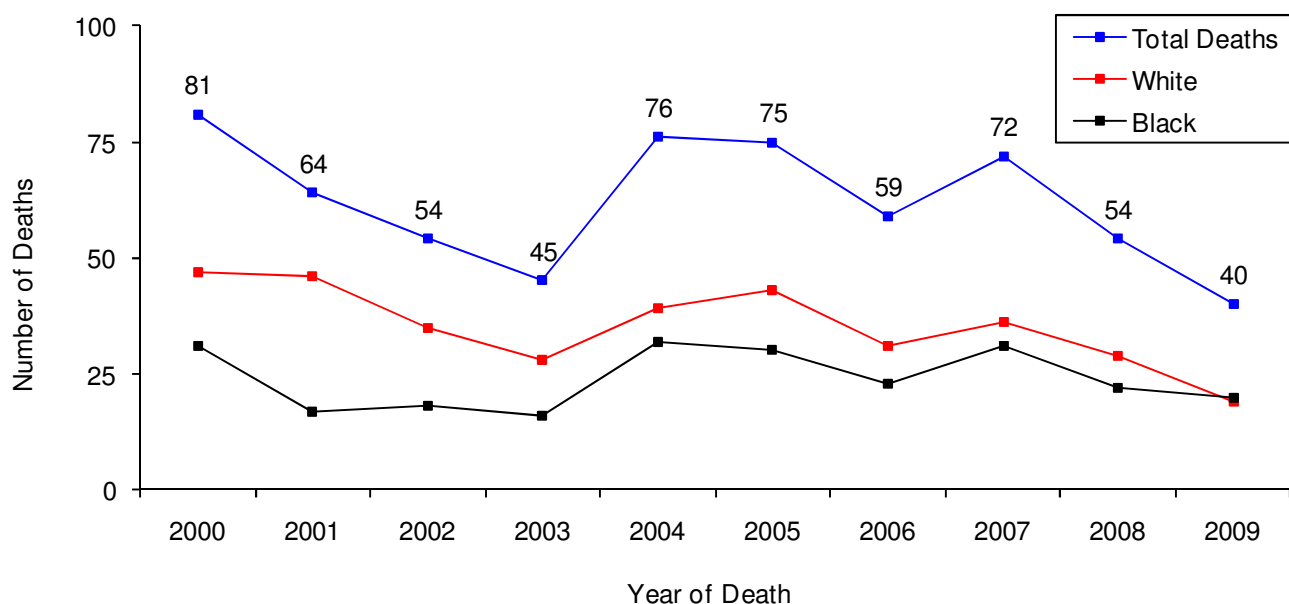
*HIV case vs. AIDS case

**Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

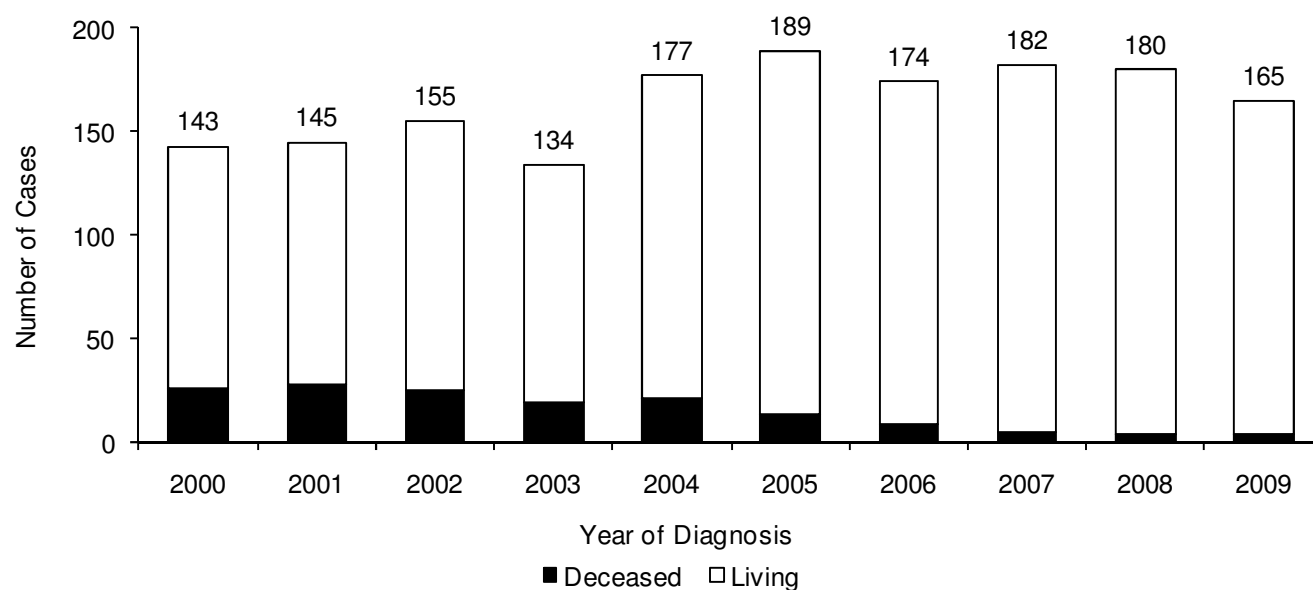
****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2009.

The median number of new diagnoses was greater for 2005-2009 compared to 2000-2004 in the Kansas City HIV region. It is difficult to determine if the increase was due to increased testing, a true increase in the number of infections, or other factors. Differences in the number of persons sub-classified as AIDS cases each year are due to the progression of the disease over time.

Figure 5. HIV disease deaths*, by selected race, by year of death, Kansas City HIV Region, 2000—2009

*Includes deaths that have occurred among those diagnosed with HIV disease in the Kansas City HIV Region.

†Only includes deaths through December 31, 2009, and reported by February 28, 2010.

Figure 6. Persons diagnosed with HIV disease by current vital status* and year of diagnosis, Kansas City HIV Region, 2000—2009**

*Vital status on December 31, 2009.

**Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

The number of deaths among persons with HIV disease decreased from 2000-2003, increased from 2003 to 2004, and then generally decreased through 2009 (Figure 5). The lower number of deaths in 2009 was likely related in part to delays in death reporting.

Of the 143 persons diagnosed with HIV disease in 2000, 26 (18%) were deceased by the end of 2009 (Figure 6). Among the 165 persons first diagnosed in 2009, 4 (2%) were deceased at the end of 2009. The difference in the proportion of cases that were deceased was due to the length of time individuals have been living with the disease.

Table 1. Living[†] HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and by current age, Kansas City HIV Region, 2009

	HIV*			AIDS**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	1,152	83.8%	191.2	1,606	86.3%	266.6	2,758	85.3%	457.8
Female	223	16.2%	35.3	254	13.7%	40.2	477	14.7%	75.5
Total	1,375	100.0%	111.4	1,860	100.0%	150.7	3,235	100.0%	262.1
Race/Ethnicity									
White	730	53.1%	77.2	1,034	55.6%	109.3	1,764	54.5%	186.5
Black	547	39.8%	322.0	681	36.6%	400.8	1,228	38.0%	722.8
Hispanic	78	5.7%	105.0	119	6.4%	160.2	197	6.1%	265.3
Asian/Pacific Islander	14	1.0%	74.6	7	0.4%	37.3	21	0.6%	111.9
American Indian/Alaskan Native	2	0.1%	34.9	8	0.4%	139.4	10	0.3%	174.3
Two or More Races/Unknown	4	0.3%	--	11	0.6%	--	15	0.5%	--
Total	1,375	100.0%	111.4	1,860	100.0%	150.7	3,235	100.0%	262.1
Race/Ethnicity-Males									
White Male	660	57.3%	142.5	949	59.1%	204.9	1,609	58.3%	347.4
Black Male	407	35.3%	517.1	528	32.9%	670.8	935	33.9%	1187.9
Hispanic Male	69	6.0%	177.4	107	6.7%	275.1	176	6.4%	452.5
Asian/Pacific Islander Male	12	1.0%	133.4	6	0.4%	66.7	18	0.7%	200.0
American Indian/Alaskan Native Male	2	0.2%	69.4	7	0.4%	243.0	9	0.3%	312.4
Two or More Races/Unknown Male	2	0.2%	--	9	0.6%	--	11	0.4%	--
Total	1,152	100.0%	191.2	1,606	100.0%	266.6	2,758	100.0%	457.8
Race/Ethnicity-Females									
White Female	70	31.4%	14.5	85	33.5%	17.6	155	32.5%	32.1
Black Female	140	62.8%	153.5	153	60.2%	167.8	293	61.4%	321.3
Hispanic Female	9	4.0%	25.4	12	4.7%	33.9	21	4.4%	59.4
Asian/Pacific Islander Female	2	0.9%	20.5	1	0.4%	10.2	3	0.6%	30.7
American Indian/Alaskan Native Female	0	0.0%	0.0	1	0.4%	35.0	1	0.2%	35.0
Two or More Races/Unknown Female	2	0.9%	--	2	0.8%	--	4	0.8%	--
Total	223	100.0%	35.3	254	100.0%	40.2	477	100.0%	75.5
Current Age[‡]									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	7	0.5%	3.7	0	0.0%	0.0	7	0.2%	3.7
13-18	11	0.8%	10.8	3	0.2%	2.9	14	0.4%	13.7
19-24	96	7.0%	106.7	39	2.1%	43.4	135	4.2%	150.1
25-44	692	50.3%	203.2	722	38.8%	212.1	1,414	43.7%	415.3
45-64	545	39.6%	167.1	1,045	56.2%	320.4	1,590	49.1%	487.6
65+	24	1.7%	15.9	51	2.7%	33.7	75	2.3%	49.6
Total	1,375	100.0%	111.4	1,860	100.0%	150.7	3,235	100.0%	262.1

[†]Includes persons diagnosed with HIV disease in the Kansas City HIV Region who are currently living, regardless of current residence.

*Cases which remained HIV cases at the end of 2009.

**Cases classified as AIDS by December 31, 2009.

***The sum of HIV cases and AIDS cases.

****Per 100,000 population based on 2008 MDHSS estimates.

[‡]Based on age as of December 31, 2009.

Note: Percentages may not total due to rounding.

Table 2. Diagnosed HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and current age, Kansas City HIV Region, 2009

	HIV*			AIDS**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	94	82.5%	15.6	43	84.3%	7.1	137	83.0%	22.7
Female	20	17.5%	3.2	8	15.7%	1.3	28	17.0%	4.4
Total	114	100.0%	9.2	51	100.0%	4.1	165	100.0%	13.4
Race/Ethnicity									
White	43	37.7%	4.5	21	41.2%	2.2	64	38.8%	6.8
Black	61	53.5%	35.9	28	54.9%	16.5	89	53.9%	52.4
Hispanic	6	5.3%	8.1	1	2.0%	1.3	7	4.2%	9.4
Asian/Pacific Islander	1	0.9%	5.3	1	2.0%	5.3	2	1.2%	10.7
American Indian/Alaskan Native	2	1.8%	34.9	0	0.0%	0.0	2	1.2%	34.9
Two or More Races/Unknown	1	0.9%	--	0	0.0%	--	1	0.6%	--
Total	114	100.0%	9.2	51	100.0%	4.1	165	100.0%	13.4
Race/Ethnicity-Males									
White Male	40	42.6%	8.6	20	46.5%	4.3	60	43.8%	13.0
Black Male	45	47.9%	57.2	21	48.8%	26.7	66	48.2%	83.9
Hispanic Male	5	5.3%	12.9	1	2.3%	2.6	6	4.4%	15.4
Asian/Pacific Islander Male	1	1.1%	11.1	1	2.3%	11.1	2	1.5%	22.2
American Indian/Alaskan Native Male	2	2.1%	69.4	0	0.0%	0.0	2	1.5%	69.4
Two or More Races/Unknown Male	1	1.1%	--	0	0.0%	--	1	0.7%	--
Total	94	100.0%	15.6	43	100.0%	7.1	137	100.0%	22.7
Race/Ethnicity-Females									
White Female	3	15.0%	0.6	1	12.5%	0.2	4	14.3%	0.8
Black Female	16	80.0%	17.5	7	87.5%	7.7	23	82.1%	25.2
Hispanic Female	1	5.0%	2.8	0	0.0%	0.0	1	3.6%	2.8
Asian/Pacific Islander Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	20	100.0%	3.2	8	100.0%	1.3	28	100.0%	4.4
Current Age†									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
13-18	4	3.5%	3.9	0	0.0%	0.0	4	2.4%	3.9
19-24	32	28.1%	35.6	8	15.7%	8.9	40	24.2%	44.5
25-44	65	57.0%	19.1	24	47.1%	7.0	89	53.9%	26.1
45-64	12	10.5%	3.7	19	37.3%	5.8	31	18.8%	9.5
65+	1	0.9%	0.7	0	0.0%	0.0	1	0.6%	0.7
Total	114	100.0%	9.2	51	100.0%	4.1	165	100.0%	13.4

*HIV cases diagnosed during 2009 which remained HIV cases at the end of the year.

**AIDS cases initially diagnosed in 2009.

***The sum of newly diagnosed HIV cases and newly diagnosed AIDS cases. Does not include cases diagnosed prior to 2009 with HIV, which progressed to AIDS in 2009.

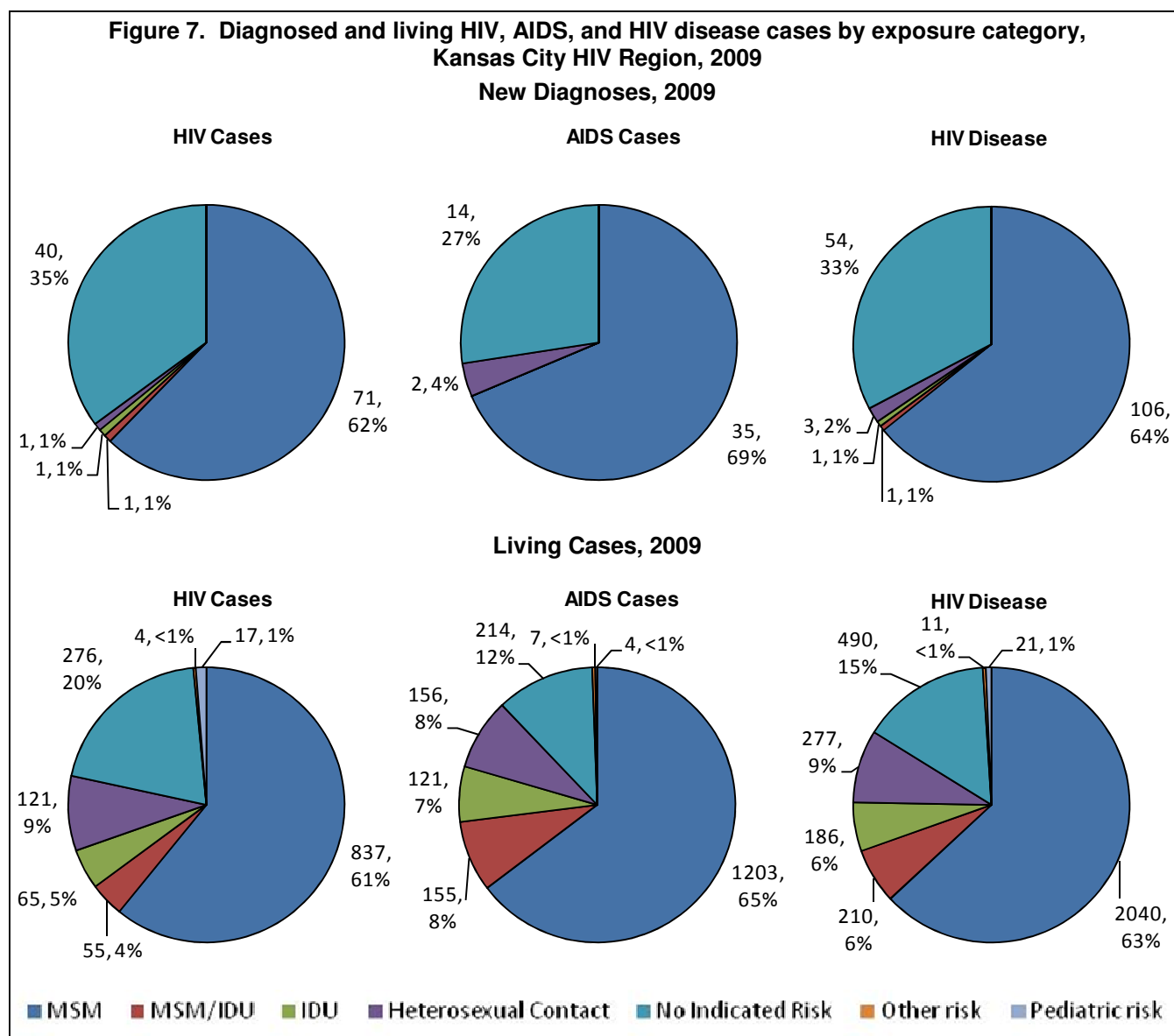
****Per 100,000 population based on 2008 MDHSS estimates.

†Based on age as of December 31, 2009.

Note: Percentages may not total due to rounding.

Of the 3,235 persons living with HIV at the end of 2009, 85% were males (Table 1). The rate of those living with HIV disease was 6.1 times greater among males than females. Although whites represented the largest proportion of living HIV disease cases (55%), the rate of those living with HIV disease was 3.9 times greater among blacks than whites. The rate was 1.4 times greater among Hispanics than whites. Among males, the rate of persons living with HIV disease was 3.4 times greater for blacks than whites, and 1.3 times greater for Hispanics than whites. Among females, the rate of those living with HIV disease was 10.0 times greater among blacks than whites, and 1.9 times greater among Hispanics than whites.

Of the 165 persons newly diagnosed with HIV disease in 2009, 31% were classified as AIDS cases by the end of 2009 (Table 2). The rate of new HIV disease diagnoses was 5.2 times greater in males than females. Persons 45-64 years of age comprised a greater proportion of new diagnoses classified as AIDS cases (37%), compared to the proportion this age group represented among new diagnoses classified as HIV cases (11%). The rate of new HIV disease cases was 7.7 times greater in blacks than whites, and 1.4 times greater in Hispanics than whites.



Among all categories, the majority of cases were attributed to MSM (Figure 7). The large proportion of cases with no indicated risk made trends difficult to interpret for all categories. The surveillance program examined methods to improve the identification and reporting of exposure category information.

Table 3. New and living HIV and AIDS cases and rates, by geographic area, Kansas City HIV Region, 2009

Geographic Area	HIV Cases						AIDS Cases					
	Diagnosed 2009*			Living			Diagnosed 2009**			Living		
	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***
Kansas City	89	78.1%	18.5	1,093	79.5%	227.5	36	70.6%	7.5	1,523	81.9%	316.9
Jackson County†	16	14.0%	4.7	156	11.3%	46.0	10	19.6%	2.9	196	10.5%	57.7
Clay County†	3	2.6%	2.9	43	3.1%	40.9	0	0.0%	0.0	51	2.7%	48.5
Cass County†	3	2.6%	3.1	18	1.3%	18.3	2	3.9%	2.0	30	1.6%	30.5
Platte County†	1	0.9%	2.2	20	1.5%	44.4	0	0.0%	0.0	11	0.6%	24.4
Remainder of Region	2	1.8%	1.2	45	3.3%	27.1	3	5.9%	1.8	49	2.6%	29.5
KANSAS CITY HIV REGION TOTAL	114	100.0%	9.2	1,375	100.0%	111.4	51	100.0%	4.1	1,860	100.0%	150.7

*HIV cases diagnosed and reported to the Department during 2009 which remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

***Per 100,000 population based on 2008 MDHSS estimates.

†Outside the limits of Kansas City.

Note: Percentages may not total due to rounding.

Table 4. Diagnosed HIV cases and rates, by selected race/ethnicity, by geographic area, Kansas City HIV Region, 2009

Area	White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Total**		
	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*
Kansas City	29	32.6%	10.5	51	57.3%	37.9	5	5.6%	11.0	89	100.0%	18.5
Jackson County†	9	56.3%	3.0	7	43.8%	40.7	0	0.0%	0.0	16	100.0%	4.7
Remainder of Region†	5	55.6%	1.3	3	33.3%	16.4	1	11.1%	8.3	9	100.0%	2.2
KANSAS CITY HIV REGION TOTAL	43	37.7%	4.5	61	53.5%	35.9	6	5.3%	8.1	114	100.0%	9.2

*Per 100,000 population based on 2008 MDHSS estimates.

**Includes cases in persons whose race/ethnicity is either unknown or not listed.

†Outside the limits of Kansas City.

Note: Row percentages are shown. Percentages may not total due to rounding.

Table 5. Diagnosed AIDS cases and rates, by selected race/ethnicity, by geographic area, Kansas City, 2009

Area	White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Total**		
	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*
Kansas City	13	36.1%	4.7	22	61.1%	16.4	1	2.8%	2.2	36	100.0%	7.5
Jackson County†	6	60.0%	2.0	4	40.0%	23.3	0	0.0%	0.0	10	100.0%	2.9
Remainder of Region†	2	40.0%	0.5	2	40.0%	11.0	0	0.0%	0.0	5	100.0%	1.2
KANSAS CITY HIV REGION TOTAL	21	41.2%	2.2	28	54.9%	16.5	1	2.0%	1.3	51	100.0%	4.1

*Per 100,000 population based on 2008 MDHSS estimates.

**Includes cases in persons whose race/ethnicity is either unknown or not listed.

†Outside the limits of Kansas City.

Note: Row percentages are shown. Percentages may not total due to rounding.

The rates of new diagnoses and living cases were highest in Kansas City compared to other areas in the Kansas City HIV region (Table 3).

There were differences in the rate of new HIV cases diagnosed by race/ethnicity among the geographic areas (Table 4). The rate of new HIV case diagnoses among whites was greatest in Kansas City. The rate of new HIV case diagnoses among blacks was highest in Jackson County.

There were also differences in the rates of new AIDS cases diagnosed by race/ethnicity among the geographic areas (Table 5). The rate of new HIV case diagnoses among whites was greatest in Kansas City. The rate of new HIV case diagnoses among blacks was highest in Jackson County.

Table 6. Newly diagnosed and living HIV and AIDS cases in men who have sex with men, by selected race/ethnicity, Kansas City HIV Region, 2009

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	30	42.3%	505	60.3%	17	48.6%	748	62.2%
Black	33	46.5%	273	32.6%	16	45.7%	368	30.6%
Hispanic	5	7.0%	48	5.7%	1	2.9%	70	5.8%
Other/Unknown	3	4.2%	11	1.3%	1	2.9%	17	1.4%
KANSAS CITY HIV REGION TOTAL	71	100.0%	837	100.0%	35	100.0%	1,203	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

Note: Percentages may not total due to rounding.

Table 7. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by current age group, Kansas City HIV Region, 2009

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	3	0.5%	0	0.0%	3	0.1%
19-24	17	1.4%	69	10.8%	4	3.4%	93	4.6%
25-44	479	38.2%	299	46.6%	66	55.9%	860	42.2%
45-64	721	57.5%	261	40.7%	46	39.0%	1,037	50.8%
65+	36	2.9%	9	1.4%	2	1.7%	47	2.3%
KANSAS CITY HIV REGION TOTAL	1,253	100.0%	641	100.0%	118	100.0%	2,040	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 8. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by geographic area, Kansas City HIV Region, 2009

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Kansas City	976	57.2%	605	35.5%	100	5.9%	1,706	83.6%
Jackson County [†]	155	80.3%	25	13.0%	12	6.2%	193	9.5%
Clay County [†]	49	87.5%	4	7.1%	3	5.4%	56	2.7%
Cass County [†]	18	85.7%	1	4.8%	0	0.0%	21	1.0%
Remaining Counties [†]	55	85.9%	6	9.4%	3	4.7%	64	3.1%
KANSAS CITY HIV REGION TOTAL	1,253	61.4%	641	31.4%	118	5.8%	2,040	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race/ethnicity in each area.

***Percentage of cases per area.

[†]Outside the limits of Kansas City.

Note: Percentages may not total due to rounding.

There were a total of 106 new HIV disease diagnoses attributed to men who have sex with men (MSM) in 2009 for the Kansas City HIV region (Table 6). Blacks represented a greater proportion of new HIV cases diagnosed in 2009 among MSM (47%) compared to the proportion of living HIV cases diagnosed among black MSM (33%). Of the newly diagnosed cases among MSM, 33% progressed to AIDS by the end of 2009.

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM (Table 7). Among white MSM living with HIV disease, the majority (58%) were between 45-64 years of age at the end of 2009. In contrast, only 41% and 39% of living black and Hispanic MSM with HIV disease, respectively, were between 45-64 years of age.

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for MSM (Table 8). In Kansas City, black MSM comprised a larger proportion of living cases compared to other areas.

Table 9. Newly diagnosed and living HIV and AIDS cases in men who have sex with men and inject drugs, by selected race/ethnicity, Kansas City HIV Region, 2009

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	0	0.0%	39	70.9%	0	--	105	67.7%
Black	0	0.0%	11	20.0%	0	--	39	25.2%
Hispanic	0	0.0%	4	7.3%	0	--	8	5.2%
Other/Unknown	1	100.0%	1	1.8%	0	--	3	1.9%
KANSAS CITY HIV REGION TOTAL	1	100.0%	55	100.0%	0	--	155	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

Note: Percentages may not total due to rounding.

Table 10. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity, by current age group, Kansas City HIV Region, 2009

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	0	0.0%	0	0.0%
25-44	46	31.9%	15	30.0%	4	33.3%	66	31.4%
45-64	97	67.4%	35	70.0%	8	66.7%	143	68.1%
65+	1	0.7%	0	0.0%	0	0.0%	1	0.5%
KANSAS CITY HIV REGION TOTAL	144	100.0%	50	100.0%	12	100.0%	210	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 11. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity, by geographic area, Kansas City HIV Region, 2009

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
Kansas City	107	62.9%	47	27.6%	12	7.1%	170	81.0%
Jackson County†	21	87.5%	3	12.5%	0	0.0%	24	11.4%
Clay County†	6	100.0%	0	0.0%	0	0.0%	6	2.9%
Remaining Counties†	10	100.0%	0	0.0%	0	0.0%	10	4.8%
KANSAS CITY HIV REGION TOTAL	144	68.6%	50	23.8%	12	5.7%	210	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race/ethnicity in each area.

***Percentage of cases per area.

†Outside the limits of Kansas City.

Note: Percentages may not total due to rounding.

There was one new HIV disease diagnosis attributed to men who have sex with men and inject drugs (MSM/IDU) in 2009 for the Kansas City HIV region (Table 9). There were 210 persons living with HIV disease attributed to MSM/IDU at the end of 2009 in the Kansas City HIV region. Whites represented the largest proportion of both living HIV and AIDS cases. However, whites comprised a larger proportion of living HIV cases among MSM/IDU (71%) compared to living AIDS cases (68%).

The distribution of living HIV disease cases by current age was similar by race/ethnicity among MSM/IDU (Table 10). Among all race/ethnicities presented, the majority of MSM/IDU living with HIV disease in the Kansas City HIV region were between 45-64 years of age.

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for MSM/IDU (Table 11). In Kansas City, black MSM/IDU comprised a larger proportion of living cases compared to other areas.

Table 12. Newly diagnosed and living HIV and AIDS cases in injecting drug users, by selected race/ethnicity and sex, Kansas City HIV Region, 2009

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	0.0%	20	30.8%	0	--	27	22.3%
Black Male	0	0.0%	16	24.6%	0	--	38	31.4%
Hispanic Male	0	0.0%	3	4.6%	0	--	7	5.8%
White Female	0	0.0%	12	18.5%	0	--	21	17.4%
Black Female	0	0.0%	11	16.9%	0	--	23	19.0%
Hispanic Female	1	100.0%	2	3.1%	0	--	4	3.3%
KANSAS CITY HIV REGION TOTAL[†]	1	100.0%	65	100.0%	0	--	121	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

[†]Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

Table 13. Living HIV disease cases in injecting drug users, by selected race/ethnicity and sex, by current age group, Kansas City HIV Region, 2009

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	1	3.0%	0	0.0%	2	1.1%
25-44	17	36.2%	13	24.1%	12	36.4%	9	26.5%	58	31.2%
45-64	28	59.6%	40	74.1%	20	60.6%	24	70.6%	121	65.1%
65+	2	4.3%	1	1.9%	0	0.0%	1	2.9%	5	2.7%
KANSAS CITY HIV REGION TOTAL	47	100.0%	54	100.0%	33	100.0%	34	100.0%	186	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 14. Living HIV disease cases in injecting drug users, by selected race/ethnicity, by geographic area, Kansas City HIV Region, 2009

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
Kansas City	53	35.3%	82	54.7%	13	8.7%	150	80.6%
Jackson County [†]	14	70.0%	3	15.0%	3	15.0%	20	10.8%
Clay County [†]	5	100.0%	0	0.0%	0	0.0%	5	2.7%
Remaining Counties [†]	8	72.7%	3	27.3%	0	0.0%	11	5.9%
KANSAS CITY HIV REGION TOTAL	80	43.0%	88	47.3%	16	8.6%	186	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race/ethnicity in each area.

***Percentage of cases per area.

[†]Outside the limits of Kansas City.

Note: Percentages may not total due to rounding.

There was one new HIV disease diagnosis attributed to injecting drug users (IDU) in 2009 for the Kansas City HIV region (Table 12). There were 186 persons living with HIV disease attributed to IDU at the end of 2009 in the Kansas City HIV region. The largest proportion of living HIV cases was white males (31%), while black males represented the largest proportion of living AIDS cases (31%).

The distribution of living HIV disease cases by current age varied by race/ethnicity and sex among IDU (Table 13). Greater proportions of white male (36%) and white female (36%) IDU living with HIV disease were between 25-44 years of age at the end of 2009 compared to black male (24%) and black female (27%) IDU.

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for IDU (Table 14). In Kansas City, black IDU comprised a larger proportion of living cases compared to other areas.

Table 15. Newly diagnosed and living HIV and AIDS cases in heterosexual contacts, by selected race/ethnicity and sex, Kansas City HIV Region, 2009

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	0.0%	4	3.3%	0	0.0%	6	3.8%
Black Male	0	0.0%	8	6.6%	0	0.0%	12	7.7%
Hispanic Male	0	0.0%	0	0.0%	0	0.0%	5	3.2%
White Female	0	0.0%	40	33.1%	0	0.0%	50	32.1%
Black Female	1	100.0%	62	51.2%	2	100.0%	76	48.7%
Hispanic Female	0	0.0%	4	3.3%	0	0.0%	5	3.2%
KANSAS CITY HIV REGION TOTAL†	1	100.0%	121	100.0%	2	100.0%	156	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

Table 16. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and sex, by current age group, Kansas City HIV Region, 2009

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	1	1.1%	6	4.3%	7	2.5%
25-44	6	60.0%	10	50.0%	46	51.1%	82	59.4%	158	57.0%
45-64	4	40.0%	9	45.0%	37	41.1%	48	34.8%	103	37.2%
65+	0	0.0%	1	5.0%	6	6.7%	2	1.4%	9	3.2%
KANSAS CITY HIV REGION TOTAL	10	100.0%	20	100.0%	90	100.0%	138	100.0%	277	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 17. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity, by geographic area, Kansas City HIV Region, 2009

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Kansas City	57	26.4%	145	67.1%	10	4.6%	216	78.0%
Jackson County†	17	56.7%	9	30.0%	3	10.0%	30	10.8%
Clay County†	8	88.9%	1	11.1%	0	0.0%	9	3.2%
Remaining Counties†	18	81.8%	3	13.6%	1	4.5%	22	7.9%
KANSAS CITY HIV REGION TOTAL	100	36.1%	158	57.0%	14	5.1%	277	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race/ethnicity in each area.

***Percentage of cases per area.

Note: Percentages may not total due to rounding.

†Outside the limits of Kansas City.

Note: Percentages may not total due to rounding.

There were a total of three new HIV disease diagnoses attributed to heterosexual contact in 2009 for the Kansas City HIV region (Table 15). All new cases were diagnosed among black females. There were 277 persons living with HIV disease attributed to heterosexual contact at the end of 2009 in the Kansas City HIV region. Black females represented the largest proportion of both living HIV (51%) and AIDS (49%) cases among heterosexual contact cases.

At the end of 2009, the majority of heterosexual contact cases living with HIV disease were between 25-44 years of age for all race/ethnicity and sex categories presented (Table 16). The greatest proportion of cases between 25-44 years old occurred among white males (60%).

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for heterosexual contact cases (Table 17). In Kansas City, black heterosexual contact cases comprised a larger proportion of living cases compared to other areas.

Table 18. Newly diagnosed and living HIV and AIDS cases with exposure category assignments for Kansas City HIV Region, 2009

Exposure category	HIV cases				AIDS cases			
	2009*		Living		2009**		Living	
Adult/Adolescent								
Men who have sex with men	93	81.6%	1,006	74.1%	43	84.3%	1,321	71.2%
Men who have sex with men and inject drugs	1	0.9%	65	4.8%	0	0.0%	170	9.2%
Injecting drug use	2	1.8%	89	6.6%	0	0.0%	148	8.0%
Heterosexual contact	18	15.8%	194	14.3%	8	15.7%	210	11.3%
Hemophilia/coagulation disorder	0	0.0%	3	0.2%	0	0.0%	5	0.3%
Blood transfusion or tissue recipient	0	0.0%	1	0.1%	0	0.0%	2	0.1%
No indicated risk (NIR)	----	-----	----	-----	----	-----	----	-----
ADULT/ADOLESCENT SUBTOTAL	114	100.0%	1,358	100.0%	51	100.0%	1,856	100.0%
Pediatric (<13 years old)								
PEDIATRIC SUBTOTAL	0	0.0%	17	100.0%	0	0.0%	4	100.0%
TOTAL	114		1,375		51		1,860	

*HIV cases reported during 2009 which remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

Note: Percentages may not total due to rounding.

The data in Table 18 have been adjusted to proportionately re-distribute individuals with no indicated risk factor based on sex and race/ethnicity to known exposure categories. These data do not reflect the true counts of persons reported in each exposure category. Among both new and living HIV and AIDS cases, MSM represented the greatest proportion of cases. MSM represented a greater proportion of new and living HIV and AIDS cases in the Kansas City HIV region compared to Missouri overall. The proportion of MSM cases was greater for new HIV and AIDS cases compared to the proportion among their respective living cases. This may indicate changes in how individual are being infected over time. However, the observed pattern may also be related to the method used to re-distribute those with unknown risks. The method used to re-distribute new cases may weight those with no indicated risk more heavily to the MSM category.

Figure 8. Reported P&S syphilis cases, by race and sex, by age group at diagnosis, Kansas City Region, 2009

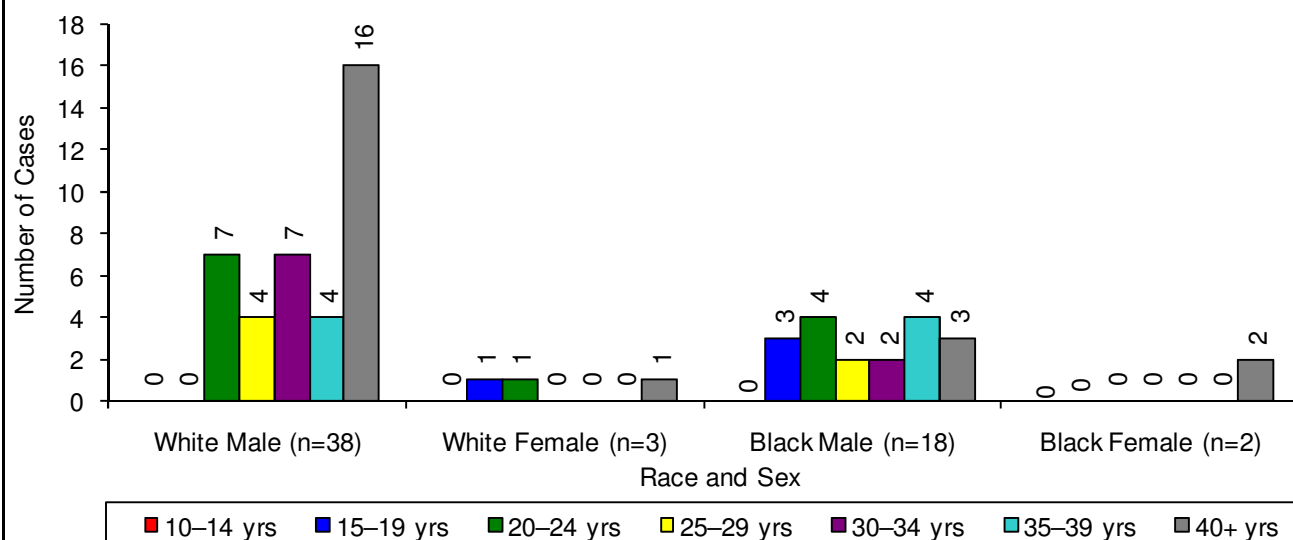
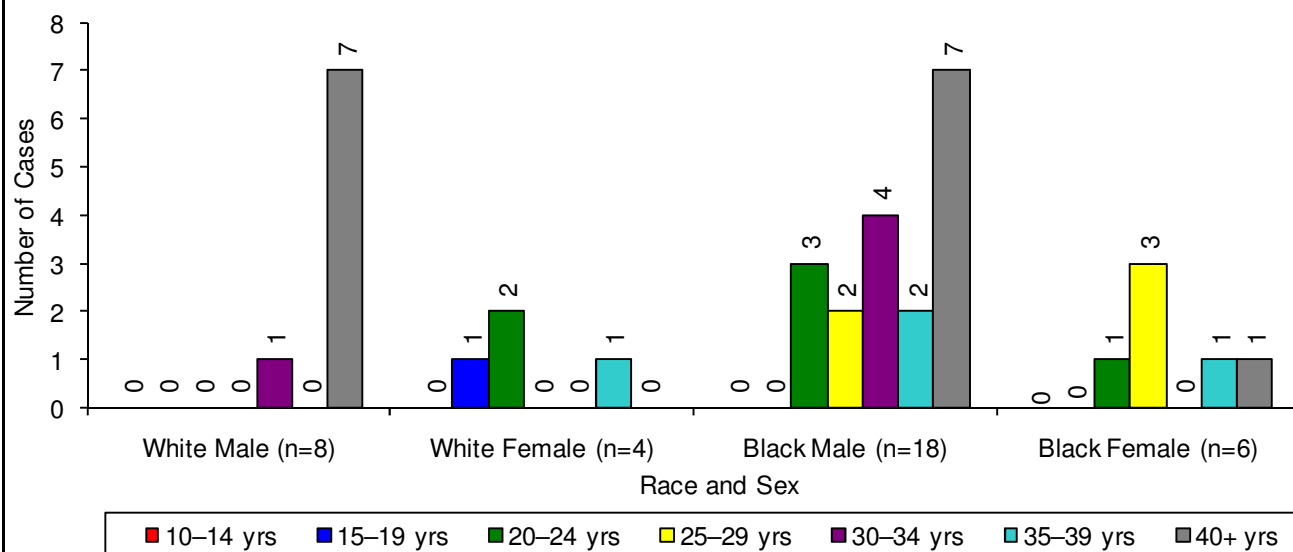
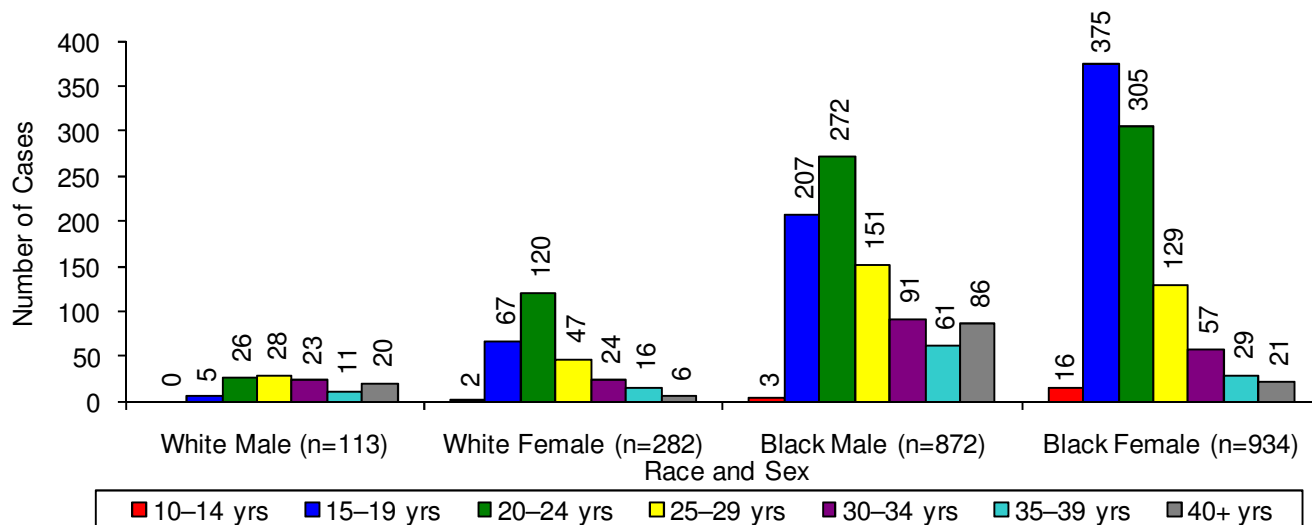


Figure 9. Reported early latent syphilis cases, by race and sex, by age group at diagnosis, Kansas City Region, 2009

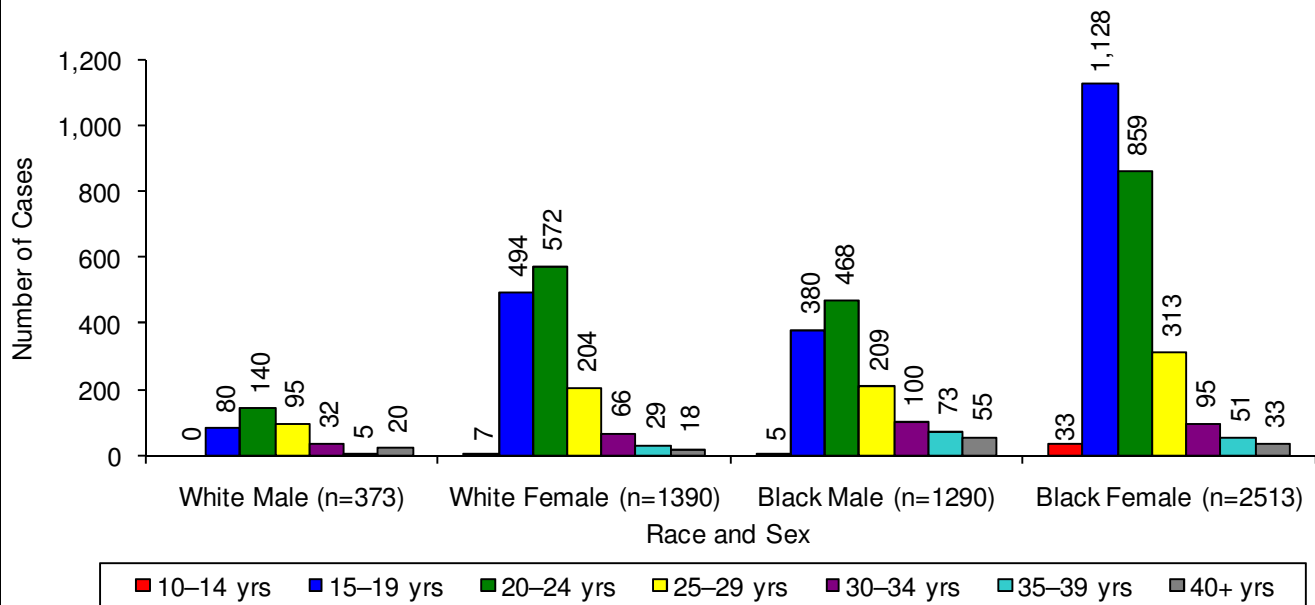


The largest number of P&S syphilis cases was reported among white males (38), followed by black males (18) in the Kansas City HIV region (Figure 8). The number of reported cases decreased from 2008 to 2009 among all race/ethnicity and sex categories presented except for white males. The number of reported P&S syphilis cases increased by one from 2008 to 2009 among white males. There were differences in the distribution of reported cases by age at diagnosis among the race/ethnicity and sex categories. Among white males, the largest number of cases was reported among individuals 40 or more years of age. Among black males, cases were more evenly distributed among the age categories.

The largest number of early latent syphilis cases was reported among black males (18), followed by white males (8) (Figure 9). The number of reported early latent syphilis cases decreased from 2008 to 2009 among all race/ethnicity and sex categories, except black males. The number of reported early latent syphilis cases increased from 14 reported in 2008 to 18 reported in 2009 among black males. Among males, individuals 40 or more years of age represented the greatest number of diagnoses.

Figure 10. Reported gonorrhea cases, by race and sex, by age group at diagnosis, Kansas City Region, 2009

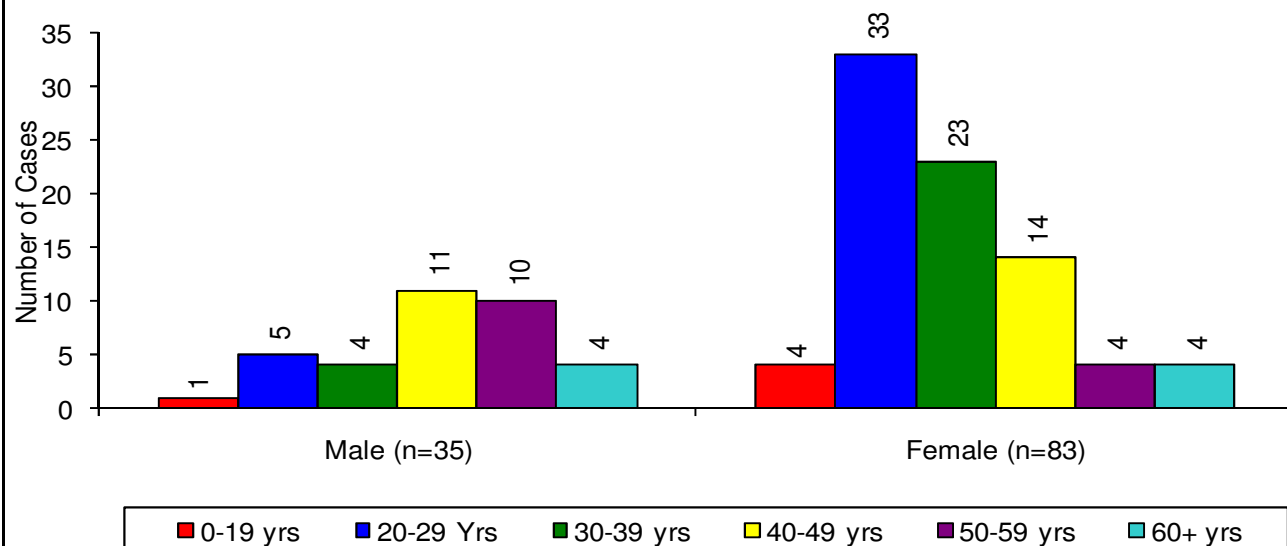
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

Figure 11. Reported chlamydia cases, by race and sex, by age group at diagnosis, Kansas City Region, 2009

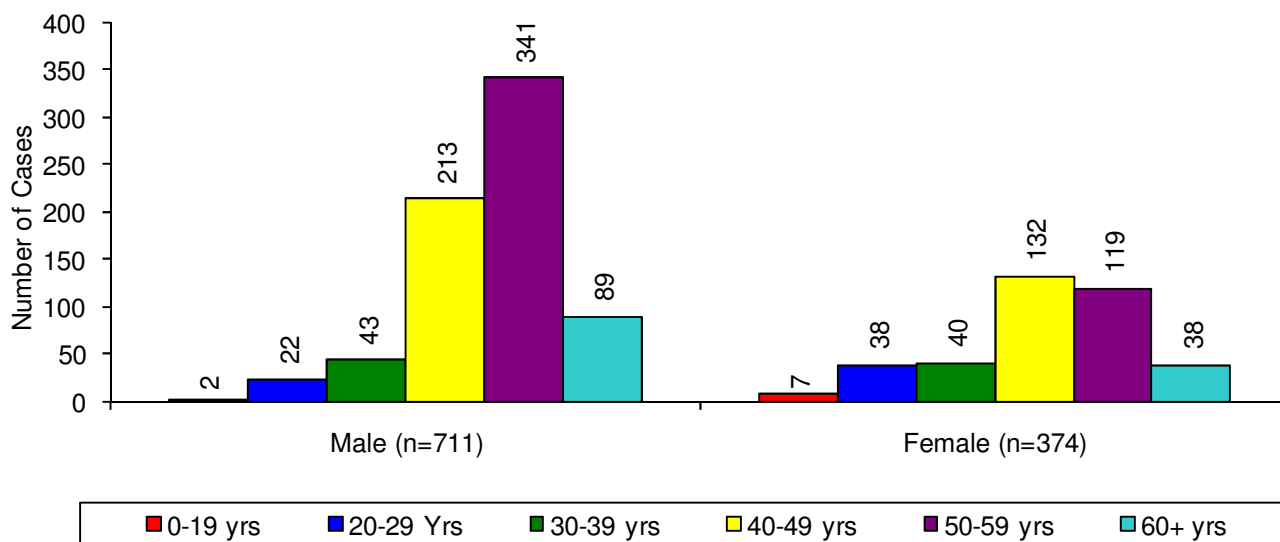
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

The largest number of gonorrhea cases was reported among black females (934), followed by black males (872) (Figure 10). The number of reported cases decreased from 2008 to 2009 among all race/ethnicity and sex categories presented, except white males. The number of reported gonorrhea cases among white males increased from 105 in 2008 to 113 reported cases in 2009. There were differences in the distribution of reported cases by age at diagnosis among the race/ethnicity and sex categories. Among black females, the largest number of gonorrhea cases was reported among those 15-19 years of age. Among white females and black males, individuals 20-24 years of age represented the largest number of reported cases. Cases were more evenly distributed by age among white males.

The largest number of chlamydia cases was reported among black females (2,513), followed by white females (1,390). The number of reported chlamydia cases increased from 2008 to 2009 among all race/ethnicity and sex categories presented. Among males and white females, the largest number of cases was reported among individuals 20-24 years of age. Among black females, individuals 15-19 years of age represented the largest number of reported cases.

Figure 12. Reported Hepatitis B cases, by sex and by age group at diagnosis, Kansas City Region, 2009

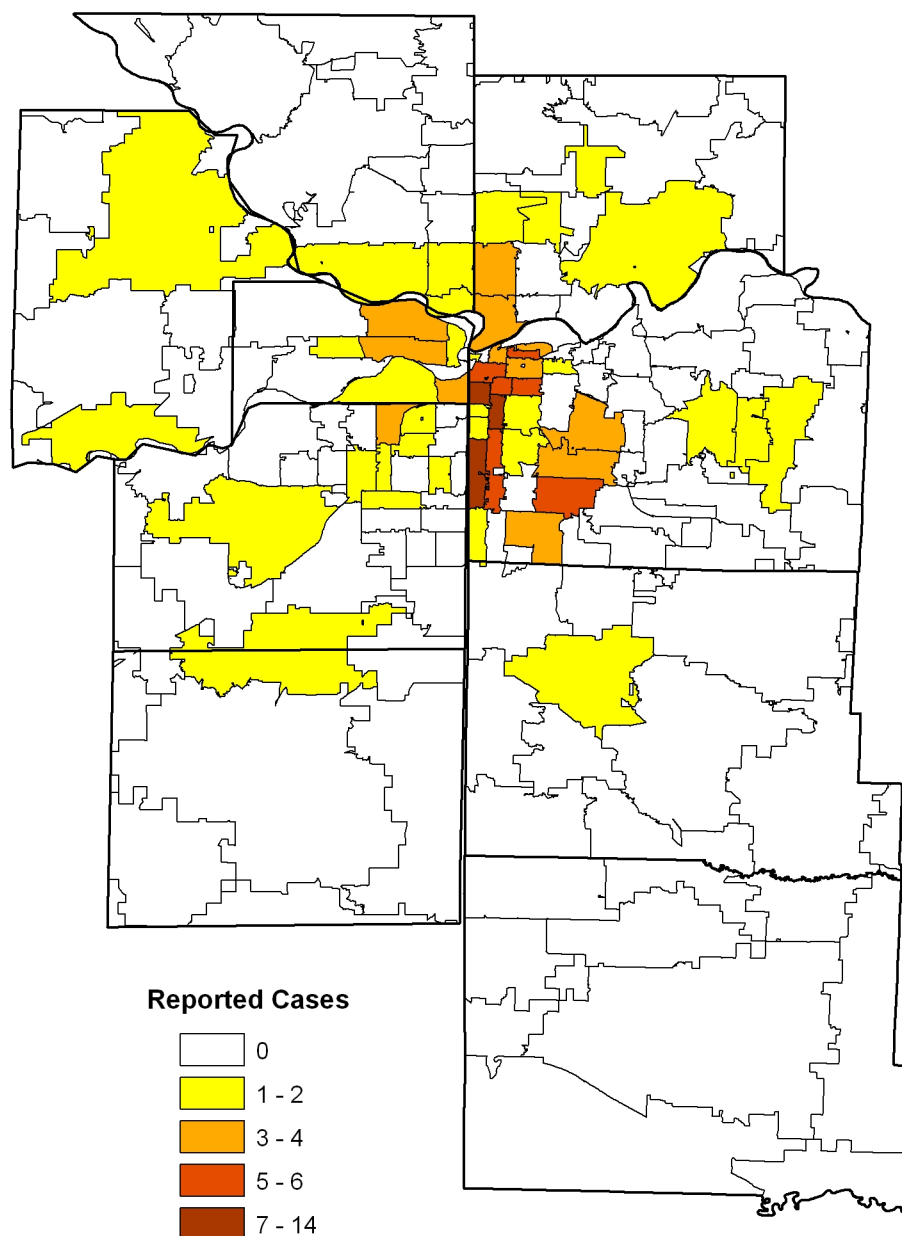
Note: Totals include persons whose age at diagnosis is unknown.

Figure 13. Reported Hepatitis C cases, by sex and by age group at diagnosis, Kansas City Region, 2009

Note: Totals include persons whose age at diagnosis is unknown.

There were 118 reported cases of Hepatitis B in the Kansas City HIV region during 2009 (Figure 12). Females represented 70% of reported Hepatitis B cases. There were differences in the age distribution of reported Hepatitis B cases by sex. Among males, the largest proportion of cases was between 40-49 years of age at diagnosis. The largest proportion of cases was 20-29 years old among females.

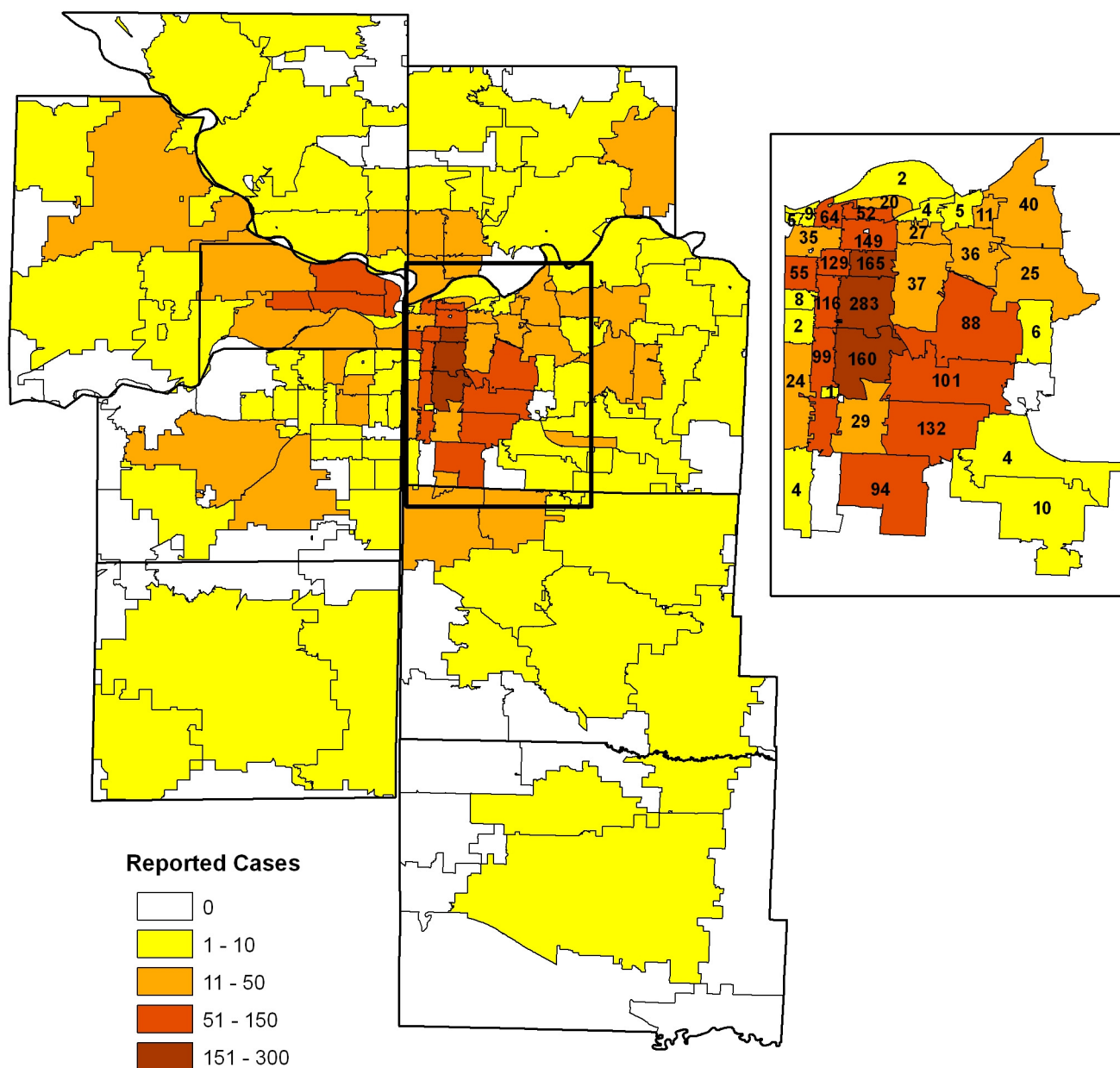
In 2009, there were 1,085 Hepatitis C cases reported in the Kansas City HIV region (Figure 13). Of the reported Hepatitis C cases, 66% were male. There were slight differences in the age at diagnosis of reported Hepatitis C cases by sex. A greater proportion of females were diagnosed at less than 50 years of age (58%) compared to males (39%).

Figure 14. Reported early syphilis cases[†], by zip code at diagnosis, Kansas City Area*, 2009

[†]Includes primary, secondary, and early latent syphilis cases.

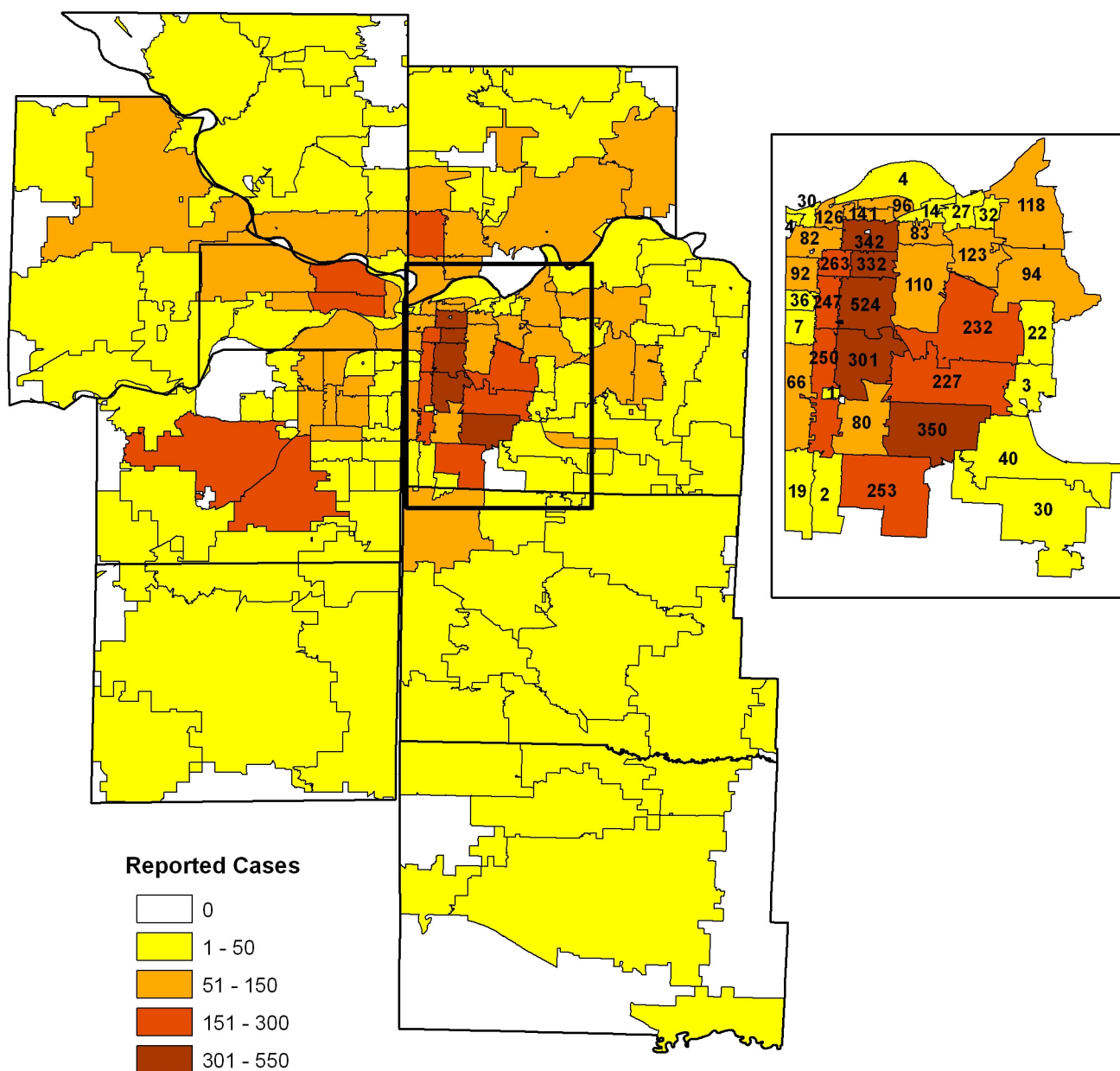
*Includes Platte, Clay, Jackson, Cass, and Bates counties in Missouri and Leavenworth, Wyandotte, Johnson, and Miami counties in Kansas.

The majority of early syphilis cases in the Kansas City Area were reported from zip codes in Missouri (74%). The largest numbers of early syphilis cases were reported among zip codes in Jackson County, Missouri. In Missouri, the largest numbers of cases in the Kansas City Area were diagnosed in the following zip codes: 64111 (14 cases), 64110 (7 cases), and 64114 (7 cases). In Kansas, the largest numbers were diagnosed in the following zip codes: 66102 (4 cases), 66103 (4 cases), and 66203 (4 cases).

Figure 15. Reported gonorrhea cases, by zip code at diagnosis, Kansas City Area*, 2009

*Includes Platte, Clay, Jackson, Cass, and Bates counties in Missouri and Leavenworth, Wyandotte, Johnson, and Miami counties in Kansas.

The majority of gonorrhea cases in the Kansas City Area were reported from zip codes in Missouri (76%). The largest numbers of gonorrhea cases were reported among zip codes in Jackson County, Missouri. In Missouri, the largest numbers of cases in the Kansas City Area were diagnosed in the following zip codes: 64130 (283 cases), 64128 (165 cases), and 64132 (160 cases). In Kansas, the largest numbers were diagnosed in the following zip codes: 66104 (122 cases), 66102 (103 cases), and 66101 (72 cases).

Figure 15. Reported chlamydia cases, by zip code at diagnosis, Kansas City Area*, 2009

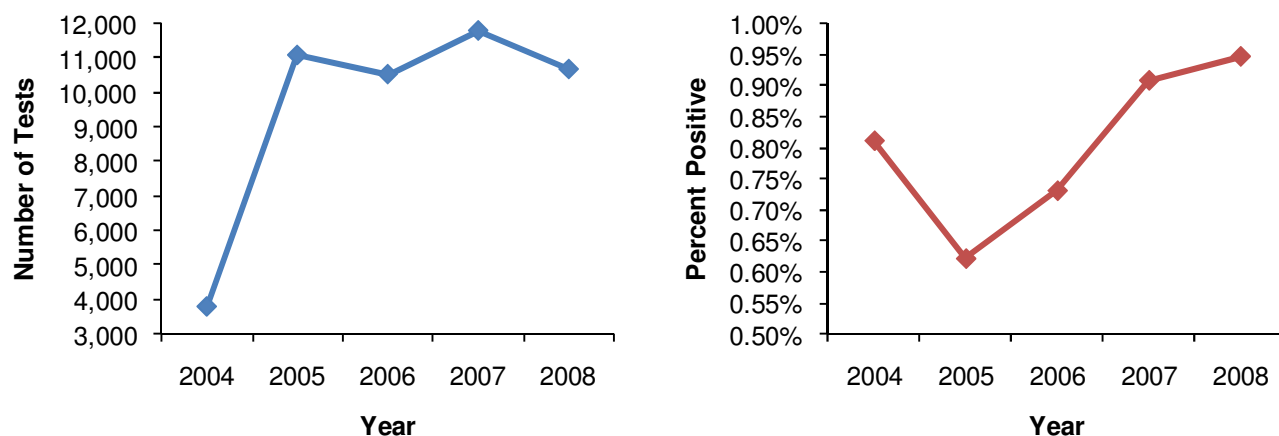
*Includes Platte, Clay, Jackson, Cass, and Bates counties in Missouri and Leavenworth, Wyandotte, Johnson, and Miami counties in Kansas.

The majority of chlamydia cases in the Kansas City Area were reported from zip codes in Missouri (71%). The largest numbers of chlamydia cases were reported among zip codes in Jackson County, Missouri. In Missouri, the largest numbers of cases in the Kansas City Area were diagnosed in the following zip codes: 64130 (524 cases), 64134 (350 cases), and 64127 (342 cases). In Kansas, the largest numbers were diagnosed in the following zip codes: 66104 (251 cases), 66102 (231 cases), and 66061 (172 cases).

Table 19. Number of HIV tests* and positive tests among counseling, testing and referral program sites, by current gender, race/ethnicity, age, exposure category, and test method, Kansas City HIV Region, 2008			
	Total Tests N	Positive Tests N	%
Total	10,678	101	0.9%
Current Gender			
Male	5,872	86	1.5%
Female	4,802	15	0.3%
Transgender	4	0	0.0%
Unknown	0	0	--
Race/Ethnicity			
White	2,104	34	1.6%
Black	8,062	60	0.7%
Hispanic	326	5	1.5%
Other/Unknown	186	2	1.1%
Age at Test			
<13	4	0	0.0%
13-18	836	5	0.6%
19-24	3,406	25	0.7%
25-44	5,004	53	1.1%
45-64	1,356	18	1.3%
65+	69	0	0.0%
Unknown	3	0	0.0%
Exposure Category			
MSM	966	61	6.3%
MSM/IDU	49	3	6.1%
IDU	233	1	0.4%
Heterosexual Contact**	177	5	2.8%
Presumed Heterosexual Contact***	4,320	11	0.3%
Unknown	4,933	20	0.4%
Test Method			
Rapid	2,982	54	1.8%
Conventional	7,696	47	0.6%
Unknown	0	0	--
*Includes only tests where a result was available and where the individual did not self-report a previously positive HIV test and reported residing in the Kansas City HIV Region.			
**Includes males and females who reported no injection drug use and reported high risk heterosexual behaviors with the opposite gender; corresponds with the CDC definition of high risk heterosexual contact.			
***Includes females who reported no history of injection drug use and reported sex with males without additional risk behaviors.			
Source: Missouri Counseling and Testing data			

Table 19 presents testing characteristics only among those tests performed at MDHSS counseling and testing sites among persons residing in the Kansas City HIV region where the results were available and for tests where the individual did not report a previously positive HIV test; there were 10,678 tests that met these criteria. Overall, less than one percent of tests were positive for HIV disease.

The number of tests fluctuated slightly from 2005-2008 among residents in the Kansas City HIV region (Figure 16). The number of tests in 2004 was incomplete, as some testing data from the Kansas City area were not entered in the MDHSS counseling and testing dataset. The test positivity increased from 2005-2008. More targeted testing of high risk groups may explain the increase observed in the percent of positive cases.

Figure 16. Number of HIV tests and percent positive results at Missouri counseling and testing sites, Kansas City HIV Region, 2004-2008

Source: Missouri Counseling and Testing data

There were variations in the distributions of case management enrollment, ADAP enrollment, and persons living with HIV disease by current gender, race/ethnicity and current age (Table 20). Females, minorities, and persons 25-44 years of age tended to represent a greater proportion of persons enrolled in case management and ADAP compared to all persons living with HIV disease in the region. Differences in demographic information may exist because data regarding persons living with HIV disease were obtained from a different source (eHARS) than information on persons enrolled in case management or ADAP (FACTORS).

Table 20. Demographic characteristics of persons enrolled in HIV medical case management, persons enrolled in ADAP, and persons living with HIV disease, Kansas City HIV Region, 2009

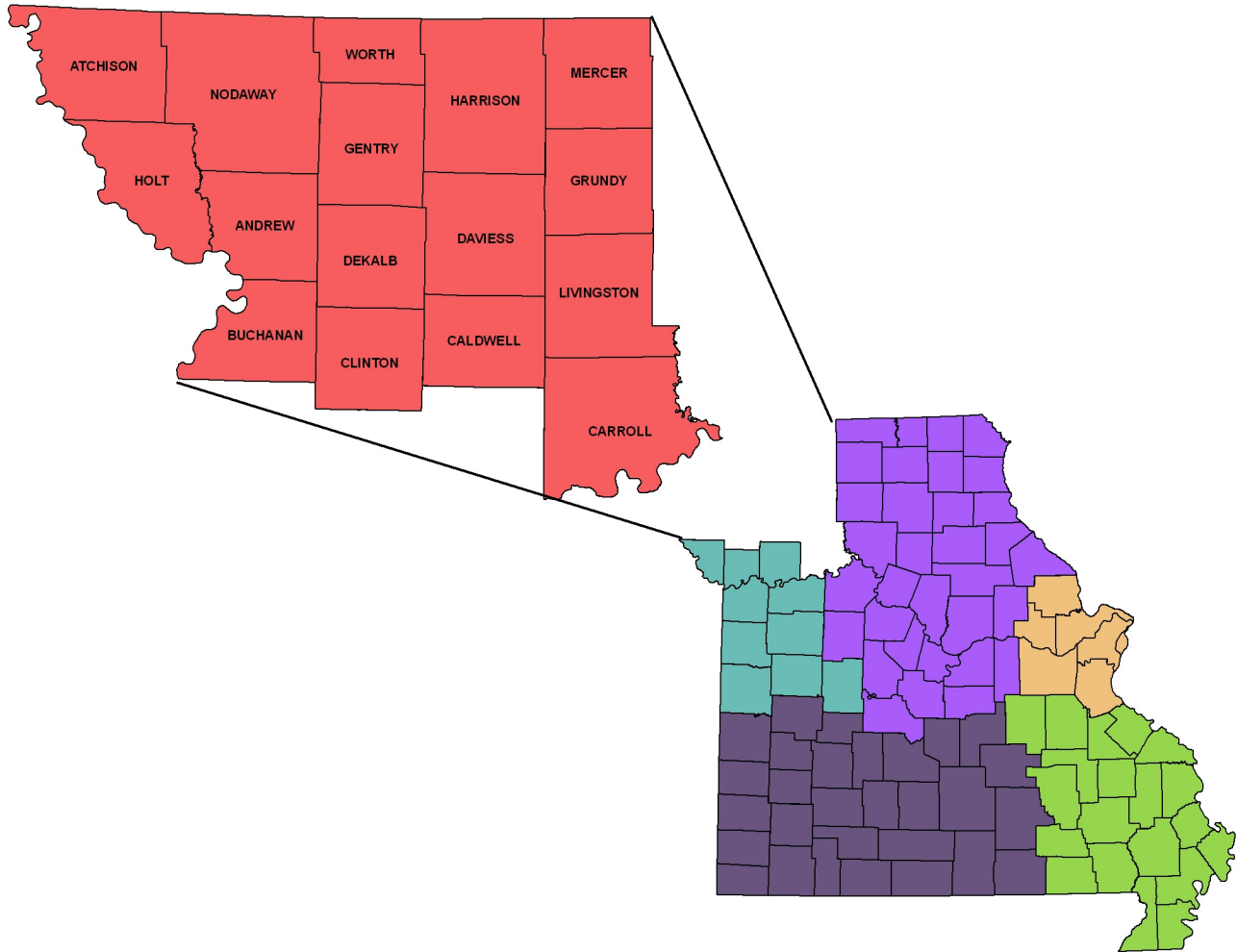
	<u>Enrolled in Case Management</u>		<u>Enrolled in ADAP*</u>		<u>Living HIV Disease</u>	
	N	%	N	%	N	%
Current Gender						
Male	1,391	80.4%	915	82.7%	2,756	85.2%
Female	321	18.6%	179	16.2%	476	14.7%
Transgender	18	1.0%	13	1.2%	3	<0.1%
Unknown	0	0.0%	0	0.0%	0	0.0%
Total	1,730	100.0%	1,107	100.0%	3,235	100.0%
Race/Ethnicity						
White	789	45.6%	495	44.7%	1,764	54.5%
Black	795	46.0%	498	45.0%	1,228	38.0%
Hispanic	119	6.9%	97	8.8%	197	6.1%
Asian/Pacific Islander	10	0.6%	8	0.7%	21	0.6%
American Indian/Alaskan Native	12	0.7%	6	0.5%	10	0.3%
Two or More Races/Unknown	5	0.3%	3	0.3%	15	0.5%
Total	1,730	100.0%	1,107	100.0%	3,235	100.0%
Current Age[‡]						
<13	15	0.9%	0	0.0%	7	0.2%
13-18	10	0.6%	4	0.4%	14	0.4%
19-24	103	6.0%	79	7.1%	135	4.2%
25-44	818	47.3%	597	53.9%	1,414	43.7%
45-64	746	43.1%	409	36.9%	1,590	49.1%
65+	38	2.2%	18	1.6%	75	2.3%
Unknown	0	0.0%	0	0.0%	0	0.0%
Total	1,730	100.0%	1,107	100.0%	3,235	100.0%

*ADAP=AIDS Drug Assistance Program

‡As of December 31, 2009

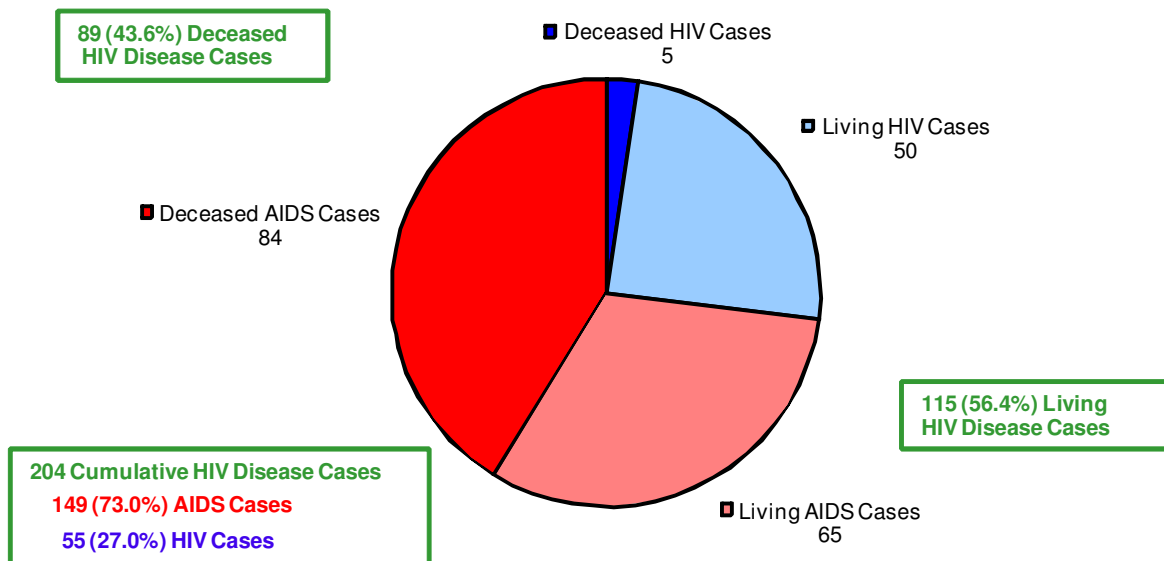
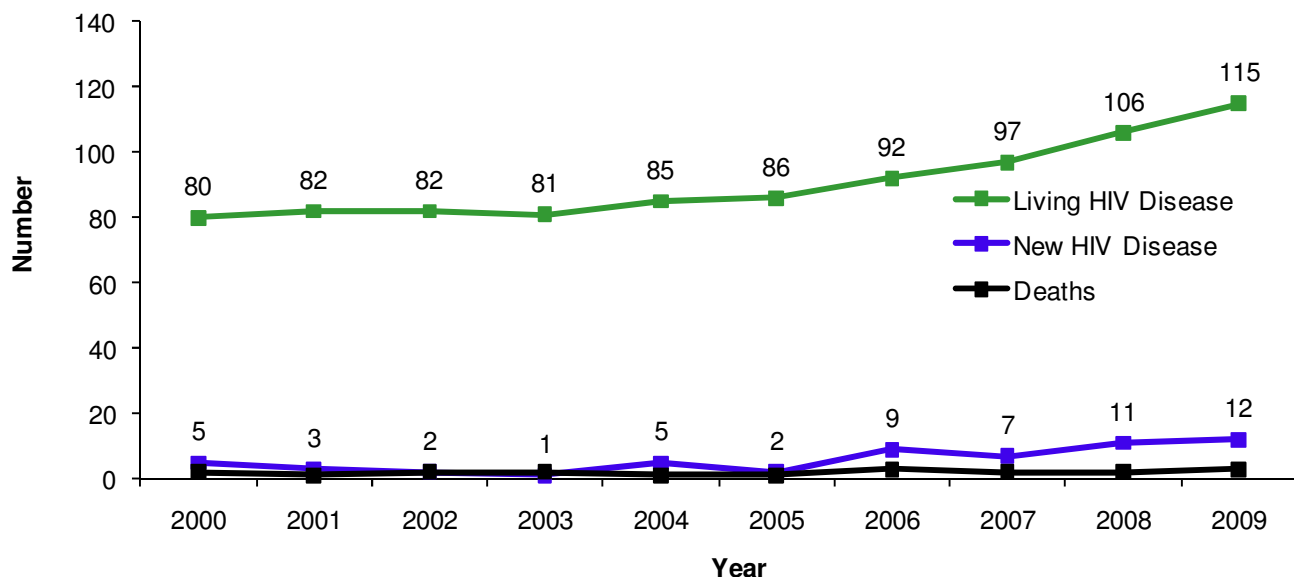
Source: FACTORS and eHARS

NORTHWEST REGION



Population Estimates, Northwest HIV Region, 2008

County	White		Black		Hispanic		Asian/Pacific Islander		American Indian/Alaskan Native		Two or More Races		Total
Andrew County	16,255	96.1%	210	1.2%	225	1.3%	72	0.4%	58	0.3%	103	0.6%	16,923
Atchison County	5,769	95.7%	134	2.2%	76	1.3%	16	0.3%	15	0.2%	21	0.3%	6,031
Buchanan County	79,903	89.4%	4,021	4.5%	3,301	3.7%	531	0.6%	363	0.4%	1,289	1.4%	89,408
Caldwell County	8,918	96.4%	82	0.9%	112	1.2%	13	0.1%	34	0.4%	89	1.0%	9,248
Carroll County	9,307	95.4%	191	2.0%	106	1.1%	12	0.1%	31	0.3%	109	1.1%	9,756
Clinton County	20,076	95.2%	317	1.5%	290	1.4%	82	0.4%	77	0.4%	252	1.2%	21,094
Daviess County	7,702	97.4%	4	0.1%	106	1.3%	24	0.3%	32	0.4%	43	0.5%	7,911
DeKalb County	10,518	85.7%	1,283	10.5%	190	1.5%	61	0.5%	92	0.7%	131	1.1%	12,275
Gentry County	6,010	97.2%	14	0.2%	57	0.9%	29	0.5%	25	0.4%	50	0.8%	6,185
Grundy County	9,597	94.8%	56	0.6%	311	3.1%	22	0.2%	41	0.4%	98	1.0%	10,125
Harrison County	8,558	96.8%	24	0.3%	132	1.5%	36	0.4%	22	0.2%	72	0.8%	8,844
Holt County	4,793	97.7%	4	0.1%	27	0.6%	5	0.1%	28	0.6%	48	1.0%	4,905
Livingston County	13,364	94.0%	391	2.8%	192	1.4%	77	0.5%	44	0.3%	145	1.0%	14,213
Mercer County	3,465	98.4%	7	0.2%	14	0.4%	0	0.0%	20	0.6%	17	0.5%	3,523
Nodaway County	20,881	94.7%	404	1.8%	215	1.0%	340	1.5%	50	0.2%	164	0.7%	22,054
Worth County	2,007	98.4%	4	0.2%	9	0.4%	2	0.1%	9	0.4%	8	0.4%	2,039
Region Total	227,123	92.9%	7,146	2.9%	5,363	2.2%	1,322	0.5%	941	0.4%	2,639	1.1%	244,534

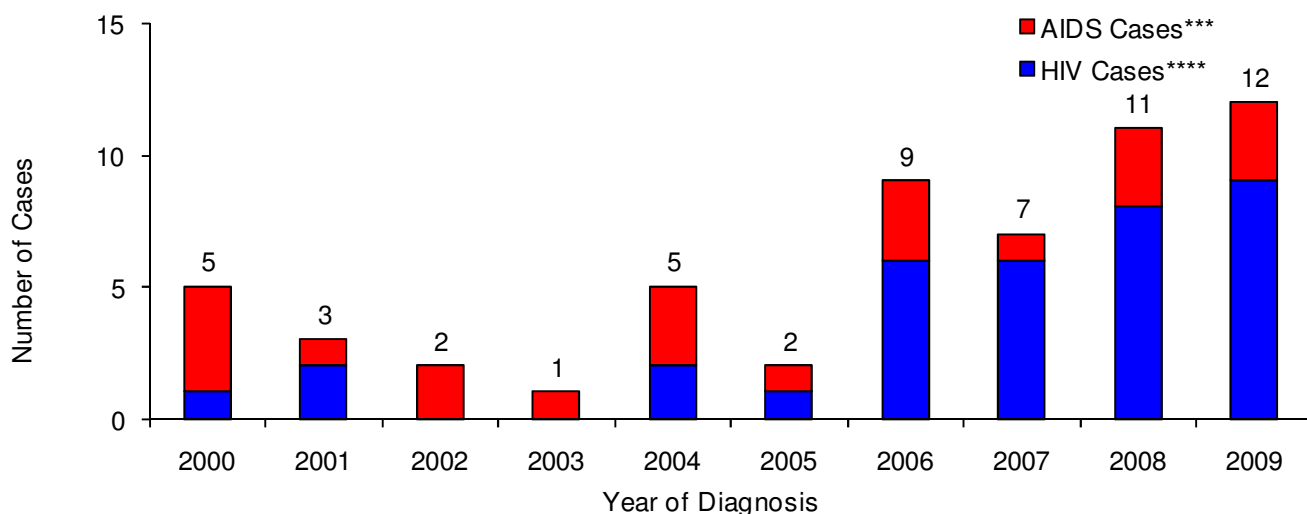
Figure 1. HIV disease cases (living and deceased), by current HIV vs. AIDS status, Northwest HIV Region, 1982—2009**Figure 2. Living and new HIV disease cases and deaths by year*, Northwest HIV Region, 2000—2009**

*For living HIV disease cases-the number of individuals living with HIV disease at the end of the year; For new HIV disease cases-the number of individuals newly diagnosed in the year, For HIV disease deaths-the number of individuals that died in the year.

From 1982 to 2009, there have been 204 HIV disease cases diagnosed in the Northwest HIV region and reported to MDHSS (Figure 1). Of the cumulative cases reported, 56% were still presumed to be living with HIV disease at the end of 2009. Among those living with HIV disease, 50 were classified as HIV cases at the end of 2009 and 65 were classified as AIDS cases.

At the end of 2009, there were 115 persons living with HIV disease whose most recent diagnosis occurred in the Northwest HIV region (Figure 2). The number of people living with HIV disease generally increased over time. There were 12 new HIV disease diagnoses in 2009. The number of new diagnoses generally increased from 2005 to 2009, while the number of deaths among persons with HIV disease remained stable.

Figure 3. HIV disease cases, by current status* and year of diagnosis, Northwest HIV Region, 2000—2009**



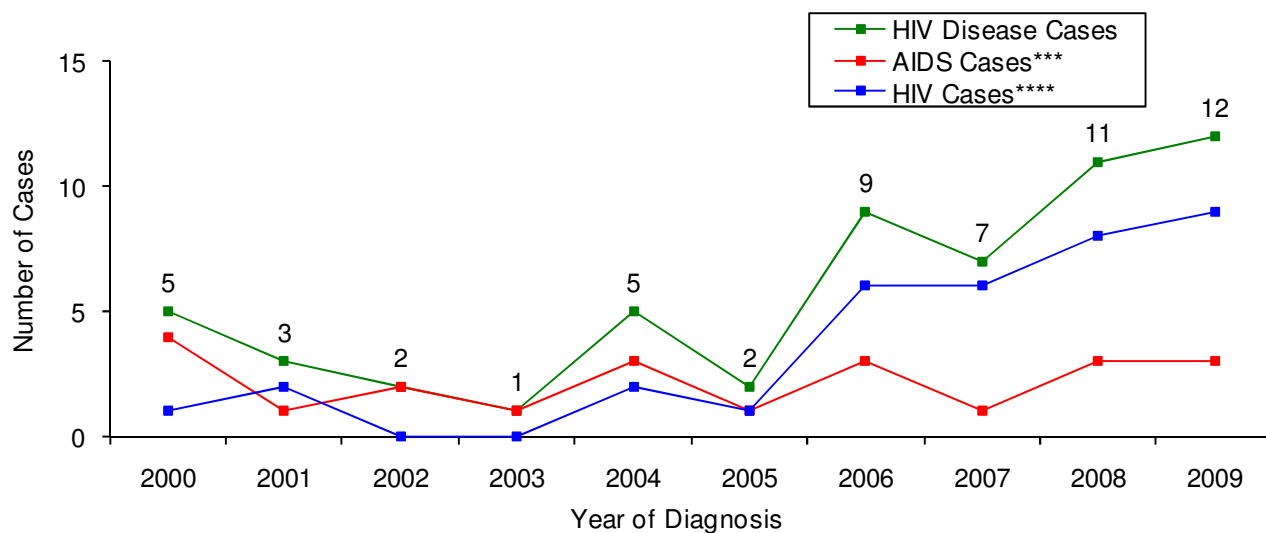
*HIV case vs. AIDS case

**Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2009.

Figure 4. Reported HIV disease cases, by current status* and year of diagnosis, Northwest HIV Region, 2000—2009**



*HIV case vs. AIDS case

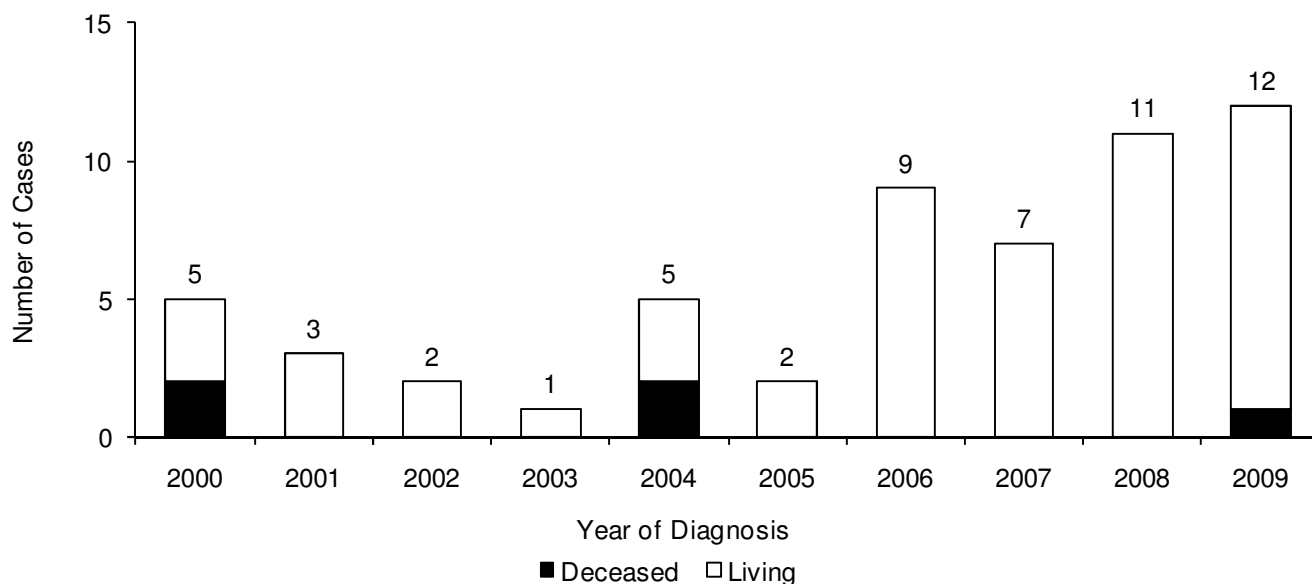
**Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2009.

The number of new HIV disease diagnoses generally increased from 2005 to 2009. It is difficult to determine if the increase was due to increased testing, a true increase in the number of infections, or other factors. Differences in the number of persons sub-classified as AIDS cases each year are due to the progression of the disease over time.

Figure 5. Persons diagnosed with HIV disease by current vital status* and year of diagnosis, Northwest HIV Region, 2000—2009**



*Vital status on December 31, 2009.

**Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

Of the five persons diagnosed with HIV disease in 2000, two (40%) were deceased by the end of 2009 (Figure 5). Among the 12 individuals first diagnosed in 2009, one (8%) was deceased at the end of 2009. The difference in the proportion of cases that are deceased is due to the length of time individuals have been living with the disease. Among persons diagnosed from 2001-2003 and 2005-2008 no deaths were reported to MDHSS.

Table 1. Living[†] HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and by current age, Northwest HIV Region, 2009

	HIV*			AIDS**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	43	86.0%	35.3	54	83.1%	44.3	97	84.3%	79.6
Female	7	14.0%	5.7	11	16.9%	9.0	18	15.7%	14.7
Total	50	100.0%	20.4	65	100.0%	26.6	115	100.0%	47.0
Race/Ethnicity									
White	38	76.0%	16.7	54	83.1%	23.8	92	80.0%	40.5
Black	7	14.0%	98.0	10	15.4%	139.9	17	14.8%	237.9
Hispanic	3	6.0%	55.9	1	1.5%	18.6	4	3.5%	74.6
Asian/Pacific Islander	1	2.0%	75.6	0	0.0%	0.0	1	0.9%	75.6
American Indian/Alaskan Native	1	2.0%	106.3	0	0.0%	0.0	1	0.9%	106.3
Two or More Races/Unknown	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	50	100.0%	20.4	65	100.0%	26.6	115	100.0%	47.0
Race/Ethnicity-Males									
White Male	35	81.4%	31.3	46	85.2%	41.1	81	83.5%	72.3
Black Male	4	9.3%	87.1	7	13.0%	152.5	11	11.3%	239.6
Hispanic Male	3	7.0%	105.7	1	1.9%	35.2	4	4.1%	141.0
Asian/Pacific Islander Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Male	1	2.3%	194.6	0	0.0%	0.0	1	1.0%	194.6
Two or More Races/Unknown Male	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	43	100.0%	35.3	54	100.0%	44.3	97	100.0%	79.6
Race/Ethnicity-Females									
White Female	3	42.9%	2.6	8	72.7%	6.9	11	61.1%	9.6
Black Female	3	42.9%	117.4	3	27.3%	117.4	6	33.3%	234.8
Hispanic Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Asian/Pacific Islander Female	1	14.3%	141.0	0	0.0%	0.0	1	5.6%	141.0
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	7	100.0%	5.7	11	100.0%	9.0	18	100.0%	14.7
Current Age[‡]									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
13-18	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
19-24	7	14.0%	32.3	0	0.0%	0.0	7	6.1%	32.3
25-44	24	48.0%	38.1	19	29.2%	30.2	43	37.4%	68.3
45-64	18	36.0%	28.8	41	63.1%	65.6	59	51.3%	94.4
65+	1	2.0%	2.5	5	7.7%	12.7	6	5.2%	15.3
Total	50	100.0%	20.4	65	100.0%	26.6	115	100.0%	47.0

[†]Includes persons diagnosed with HIV disease in the Northwest HIV Region who are currently living, regardless of current residence.

*Cases which remained HIV cases at the end of 2009.

**Cases classified as AIDS by December 31, 2009.

***The sum of HIV cases and AIDS cases.

****Per 100,000 population based on 2008 MDHSS estimates.

[‡]Based on age as of December 31, 2009.

Note: Percentages may not total due to rounding.

Table 2. Diagnosed HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and current age, Northwest HIV Region, 2009

	HIV*			AIDS**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	9	100.0%	7.4	3	100.0%	2.5	12	100.0%	9.8
Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Total	9	100.0%	3.7	3	100.0%	1.2	12	100.0%	4.9
Race/Ethnicity									
White	8	88.9%	3.5	1	33.3%	0.4	9	75.0%	4.0
Black	0	0.0%	0.0	2	66.7%	28.0	2	16.7%	28.0
Hispanic	1	11.1%	18.6	0	0.0%	0.0	1	8.3%	18.6
Asian/Pacific Islander	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	9	100.0%	3.7	3	100.0%	1.2	12	100.0%	4.9
Race/Ethnicity-Males									
White Male	8	88.9%	7.1	1	33.3%	0.9	9	75.0%	8.0
Black Male	0	0.0%	0.0	2	66.7%	43.6	2	16.7%	43.6
Hispanic Male	1	11.1%	35.2	0	0.0%	0.0	1	8.3%	35.2
Asian/Pacific Islander Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Male	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	9	100.0%	7.4	3	100.0%	2.5	12	100.0%	9.8
Race/Ethnicity-Females									
White Female	0	--	0.0	0	--	0.0	0	--	0.0
Black Female	0	--	0.0	0	--	0.0	0	--	0.0
Hispanic Female	0	--	0.0	0	--	0.0	0	--	0.0
Asian/Pacific Islander Female	0	--	0.0	0	--	0.0	0	--	0.0
American Indian/Alaskan Native Female	0	--	0.0	0	--	0.0	0	--	0.0
Two or More Races/Unknown Female	0	--	--	0	--	--	0	--	--
Total	0	--	0.0	0	--	0.0	0	--	0.0
Current Age†									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
13-18	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
19-24	3	33.3%	13.8	0	0.0%	0.0	3	25.0%	13.8
25-44	4	44.4%	6.4	0	0.0%	0.0	4	33.3%	6.4
45-64	2	22.2%	3.2	2	66.7%	3.2	4	33.3%	6.4
65+	0	0.0%	0.0	1	33.3%	2.5	1	8.3%	2.5
Total	9	100.0%	3.7	3	100.0%	1.2	12	100.0%	4.9

*HIV cases diagnosed during 2009 which remained HIV cases at the end of the year.

**AIDS cases initially diagnosed in 2009.

***The sum of newly diagnosed HIV cases and newly diagnosed AIDS cases. Does not include cases diagnosed prior to 2009 with HIV, which progressed to AIDS in 2009.

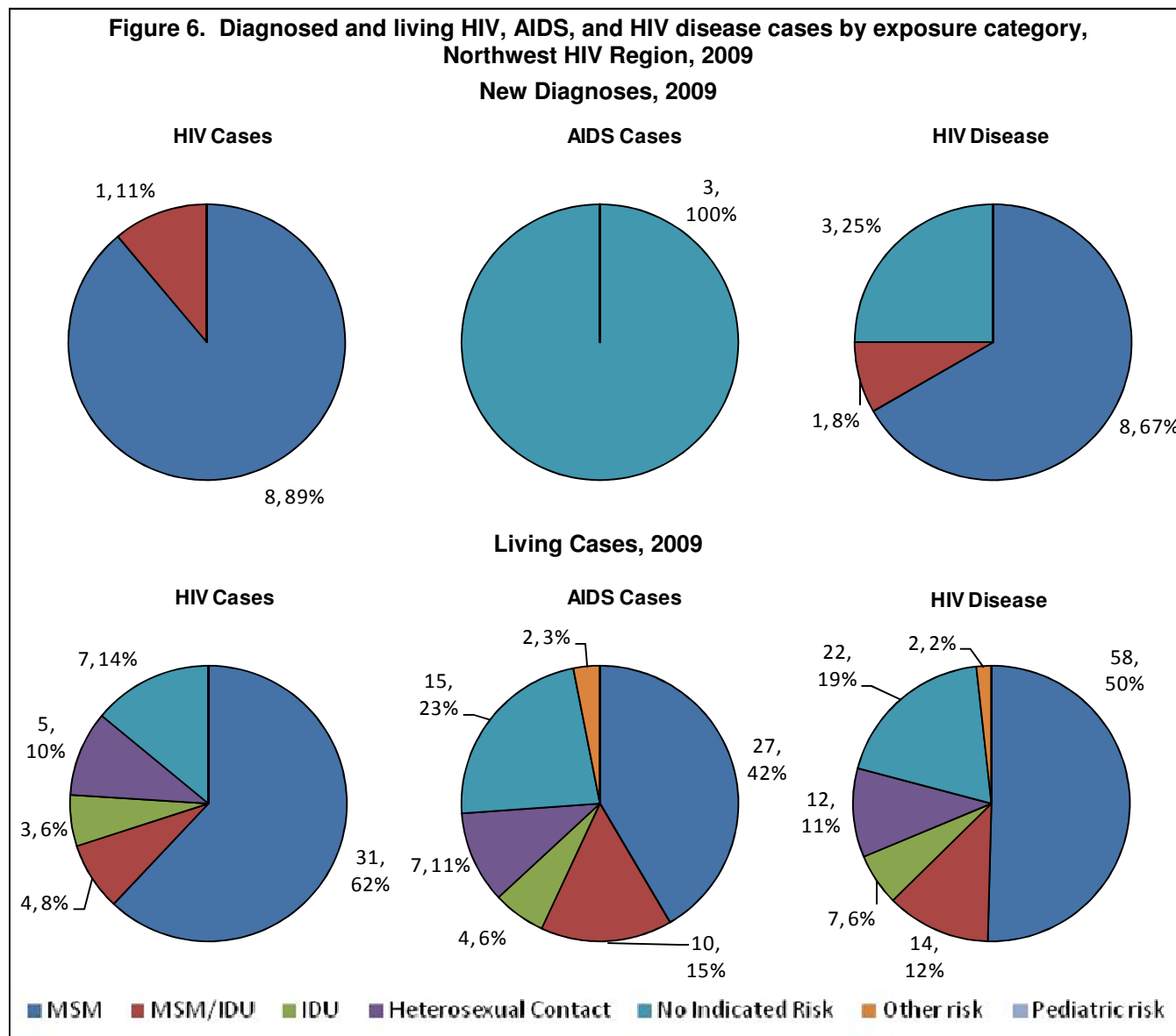
****Per 100,000 population based on 2008 MDHSS estimates.

†Based on age as of December 31, 2009.

Note: Percentages may not total due to rounding.

Of the 115 persons living with HIV at the end of 2009, 84% were males (Table 1). The rate of those living with HIV disease was 5.4 times greater among males than females. Although whites represented the largest proportion of living HIV disease cases (80%), the rate of those living with HIV disease was 5.9 times greater among blacks than whites. The rate was 1.8 times greater among Hispanics than whites. However, the number of Hispanics living with HIV disease was small, and the results should be interpreted with caution. Blacks comprised a larger proportion of female cases living with HIV disease (33%) compared to male cases (11%). The majority of living HIV disease cases were 45-64 years old at the end of 2009 (51%).

Of the 12 newly diagnosed with HIV disease in 2009, 25% were classified as AIDS cases by the end of 2009 (Table 2). Males represented all new diagnoses. The majority of all new HIV and AIDS cases diagnosed occurred among whites (75%). An equal number of new diagnoses occurred among individuals 25-44 and 45-64 years of age (4).



Among all categories, the majority of cases with a known risk factor were attributed to MSM (Figure 6). The large proportion of cases with no indicated risk made trends difficult to interpret for all categories. The surveillance program examined methods to improve the identification and reporting of exposure category information.

Table 3. New and living HIV and AIDS cases and rates, by geographic area, Northwest HIV Region, 2009

Geographic Area	HIV Cases						AIDS Cases					
	Diagnosed 2009*			Living			Diagnosed 2009**			Living		
	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***
Buchanan County	7	77.8%	7.8	32	64.0%	35.8	1	33.3%	1.1	38	58.5%	42.5
Clinton County	0	0.0%	0.0	4	8.0%	19.0	1	33.3%	4.7	3	4.6%	14.2
Andrew County	0	0.0%	0.0	1	2.0%	5.9	0	0.0%	0.0	3	4.6%	17.7
Caldwell County	1	11.1%	10.8	3	6.0%	32.4	0	0.0%	0.0	3	4.6%	32.4
Nodaway County	0	0.0%	0.0	5	10.0%	22.7	0	0.0%	0.0	3	4.6%	13.6
Remainder of Region	1	11.1%	1.2	5	10.0%	5.8	1	33.3%	1.2	15	23.1%	17.5
NORTHWEST HIV REGION	9	100.0%	3.7	50	100.0%	20.4	3	100.0%	1.2	65	100.0%	26.6

*HIV cases diagnosed and reported to the Department during 2009 which remained HIV cases at the end of the year.

**Does not include HIV cases that progressed to AIDS.

***Per 100,000 population based on 2008 MDHSS estimates.

Note: Percentages may not total due to rounding.

The greatest proportions of new and living HIV disease cases were diagnosed in Buchanan County (Table 3). In Buchanan County, 57% of living HIV disease cases progressed to AIDS by the end of 2009. The rates of individuals living with HIV and AIDS were also greatest in Buchanan County.

Table 4. Newly diagnosed and living HIV and AIDS cases in men who have sex with men, by selected race/ethnicity, Northwest HIV Region, 2009

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	7	87.5%	28	90.3%	0	--	25	92.6%
Black	0	0.0%	2	6.5%	0	--	2	7.4%
Hispanic	1	12.5%	1	3.2%	0	--	0	0.0%
Other/Unknown	0	0.0%	0	0.0%	0	--	0	0.0%
NORTHWEST HIV REGION TOTAL	8	100.0%	31	100.0%	0	--	27	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

Note: Percentages may not total due to rounding.

Table 5. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by current age group, Northwest HIV Region, 2009

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	3	5.7%	1	25.0%	1	100.0%	5	8.6%
25-44	18	34.0%	1	25.0%	0	0.0%	19	32.8%
45-64	30	56.6%	2	50.0%	0	0.0%	32	55.2%
65+	2	3.8%	0	0.0%	0	0.0%	2	3.4%
NORTHWEST HIV REGION TOTAL	53	100.0%	4	100.0%	1	100.0%	58	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 6. Living HIV disease cases in men who have sex with men, by geographic area, Northwest HIV Region, 2009

Geographic Area	Cases	%
Buchanan County	41	70.7%
Remaining Counties	17	29.3%
NORTHWEST HIV REGION TOTAL	58	100.0%

There were a total of eight new HIV disease diagnoses attributed to men who have sex with men (MSM) in 2009 for the Northwest HIV region (Table 4). All but one of the new diagnoses occurred among whites. There were 58 living HIV disease cases attributed to MSM in the Northwest HIV region. Whites represented 90% of living HIV cases and 93% of living AIDS cases.

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM (Table 5). Among white and black MSM living with HIV disease the greatest proportion was between 45-64 years of age at the end of 2009.

Buchanan County residents accounted for the largest number of living MSM in the Northwest HIV region (Table 6).

Table 7. Newly diagnosed and living HIV and AIDS cases in men who have sex with men and inject drugs, by selected race/ethnicity, Northwest HIV Region, 2009

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	1	100.0%	3	75.0%	0	--	9	90.0%
Black	0	0.0%	0	0.0%	0	--	1	10.0%
Hispanic	0	0.0%	0	0.0%	0	--	0	0.0%
Other/Unknown	0	0.0%	1	25.0%	0	--	0	0.0%
NORTHWEST REGION TOTAL	1	100.0%	4	100.0%	0	--	10	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

Note: Percentages may not total due to rounding.

Table 8. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity, by current age group, Northwest HIV Region, 2009

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	--	0	0.0%
19-24	0	0.0%	0	0.0%	0	--	0	0.0%
25-44	5	41.7%	0	0.0%	0	--	5	35.7%
45-64	7	58.3%	1	100.0%	0	--	9	64.3%
65+	0	0.0%	0	0.0%	0	--	0	0.0%
NORTHWEST HIV REGION TOTAL	12	100.0%	1	100.0%	0	--	14	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 9. Living HIV disease cases in men who have sex with men and inject drugs, by geographic area, Northwest HIV Region, 2009

Geographic Area	Cases	%
NORTHWEST HIV REGION TOTAL	14	100.0%

There was one new HIV disease diagnosis attributed to men who have sex with men and inject drugs (MSM/IDU) in 2009 for the Northwest HIV region (Table 7). There were 14 MSM/IDU living with HIV disease at the end of 2009 whose most recent diagnosis occurred in the Northwest region. Whites represented the largest proportion of both living HIV and AIDS cases.

Overall, the majority of MSM/IDU living with HIV disease were between 45-64 years of age at the end of 2009 (Table 8).

Table 10. Newly diagnosed and living HIV and AIDS cases in injecting drug users, by selected race/ethnicity and sex, Northwest HIV Region, 2009

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	--	1	33.3%	0	--	3	75.0%
Black Male	0	--	1	33.3%	0	--	1	25.0%
Hispanic Male	0	--	0	0.0%	0	--	0	0.0%
White Female	0	--	1	33.3%	0	--	0	0.0%
Black Female	0	--	0	0.0%	0	--	0	0.0%
Hispanic Female	0	--	0	0.0%	0	--	0	0.0%
NORTHWEST HIV REGION TOTAL[†]	0	--	3	100.0%	0	--	4	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

Table 11. Living HIV disease cases in injecting drug users, by selected race/ethnicity, by current age group, Northwest HIV Region, 2009

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	--	0	0.0%
19-24	0	0.0%	0	0.0%	0	0.0%	0	--	0	0.0%
25-44	1	25.0%	1	50.0%	1	100.0%	0	--	3	42.9%
45-64	3	75.0%	1	50.0%	0	0.0%	0	--	4	57.1%
65+	0	0.0%	0	0.0%	0	0.0%	0	--	0	0.0%
NORTHWEST HIV REGION TOTAL	4	100.0%	2	100.0%	1	100.0%	0	--	7	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 12. Living HIV disease cases in injecting drug users, by geographic area, Northwest HIV Region, 2009

Geographic Area	Cases	%
NORTHWEST HIV REGION TOTAL	7	100.0%

There were no new HIV disease diagnoses attributed to injecting drug users (IDU) in 2009 for the Northwest HIV region (Table 10). There were seven living HIV disease cases attributed to IDU at the end of 2009 in the Northwest HIV region. Of the living HIV disease cases, 57% were classified as AIDS at the end of 2009. Males represented all but one of the living cases among IDU.

Among IDU living with HIV disease, four were between 45-64 years old and three were 25-44 years old at the end of 2009 (Table 11).

Table 13. Newly diagnosed and living HIV and AIDS cases in heterosexual contacts, by selected race/ethnicity and sex, Northwest HIV Region, 2009

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	--	1	20.0%	0	--	0	0.0%
Black Male	0	--	0	0.0%	0	--	0	0.0%
Hispanic Male	0	--	0	0.0%	0	--	0	0.0%
White Female	0	--	2	40.0%	0	--	5	71.4%
Black Female	0	--	2	40.0%	0	--	2	28.6%
Hispanic Female	0	--	0	0.0%	0	--	0	0.0%
NORTHWEST HIV REGION TOTAL[†]	0	--	5	100.0%	0	--	7	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

Table 14. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and sex, by current age group, Northwest HIV Region, 2009

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	--	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	--	0	0.0%	0	0.0%	0	0.0%
25-44	0	0.0%	0	--	3	42.9%	3	75.0%	6	50.0%
45-64	1	100.0%	0	--	3	42.9%	1	25.0%	5	41.7%
65+	0	0.0%	0	--	1	14.3%	0	0.0%	1	8.3%
NORTHWEST HIV REGION TOTAL	1	100.0%	0	--	7	100.0%	4	100.0%	12	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 15. Living HIV disease cases in heterosexual contacts, by geographic area, Northwest HIV Region, 2009

Geographic Area	Total	
	Cases	%
Buchanan County	7	58.3%
Remaining Counties	5	41.7%
NORTHWEST HIV REGION TOTAL	12	100.0%

There were no new HIV disease diagnoses attributed to heterosexual contact in 2009 for the Northwest HIV region (Table 13). There were 12 living HIV disease cases attributed to heterosexual contact at the end of 2009 in the Northwest HIV region. Of the living cases, 58% were classified as AIDS at the end of 2009. Females represented all but one of the living HIV disease cases.

At the end of 2009, persons 25-44 years of age comprised the largest number of heterosexual contact cases living with HIV disease in the Northwest HIV region (Table 14).

Figure 7. Reported P&S syphilis cases, by race and sex, by age group at diagnosis, Northwest Region, 2009

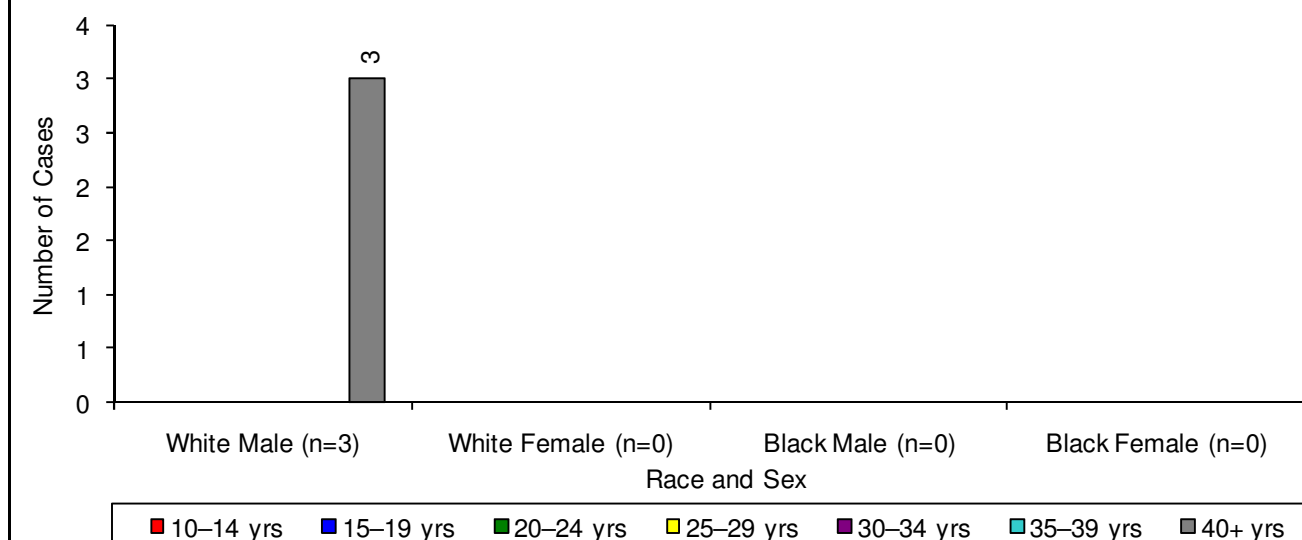
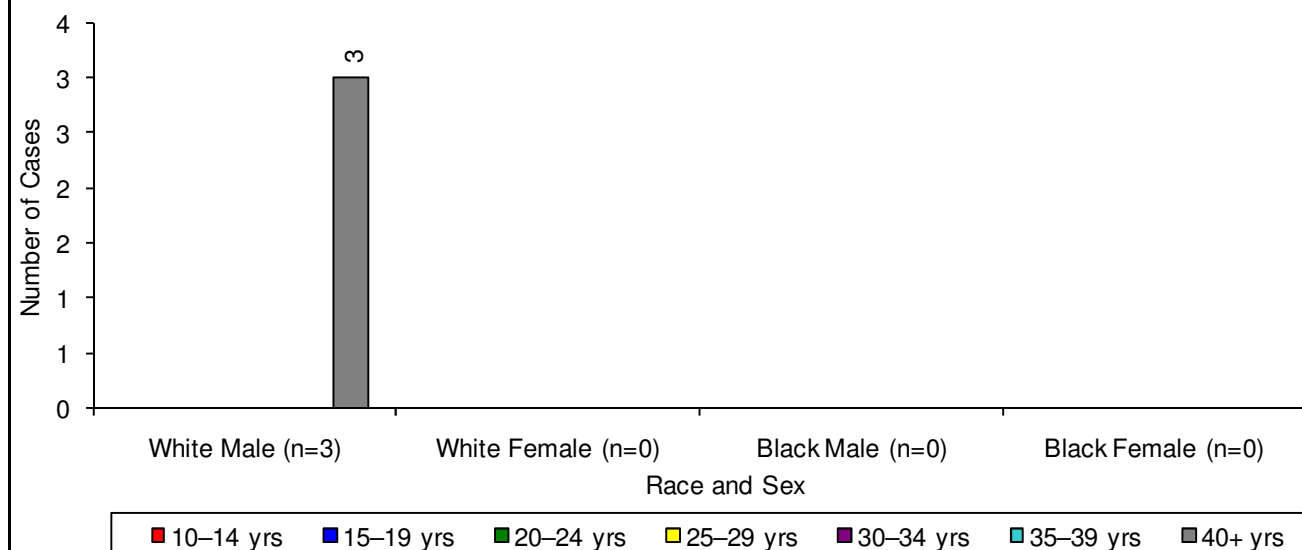
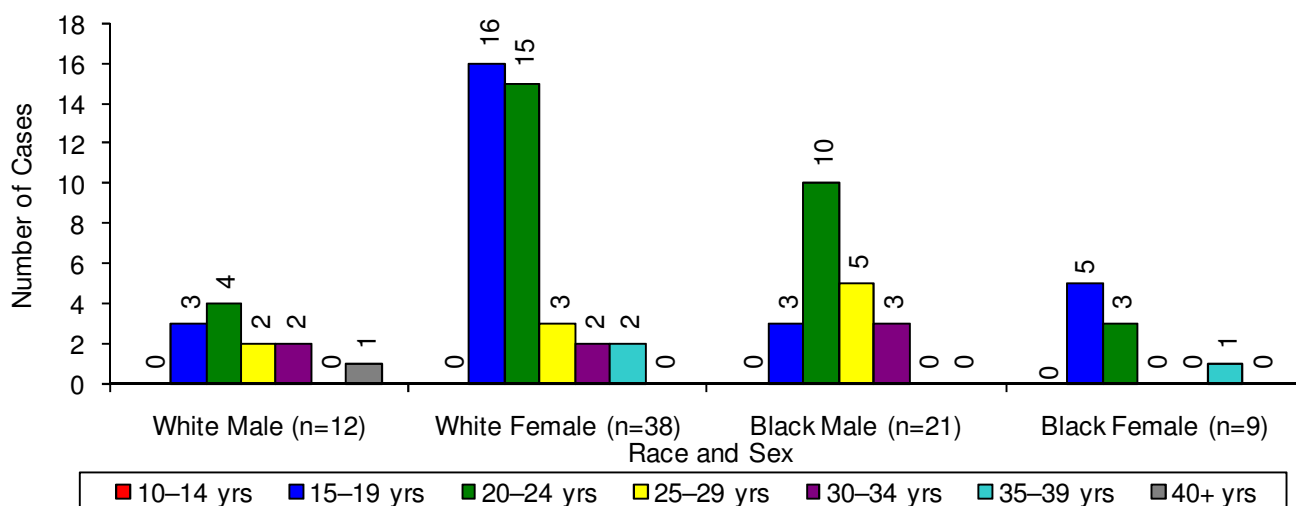


Figure 8. Reported early latent syphilis cases, by race and sex, by age group at diagnosis, Northwest Region, 2009

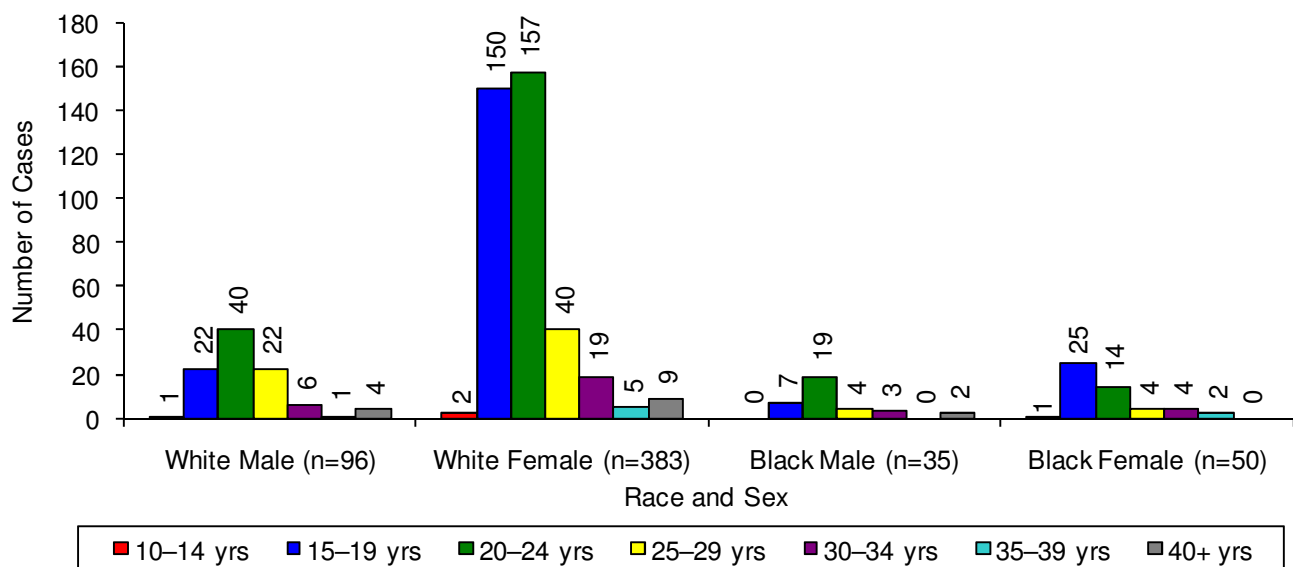


P&S syphilis cases were only reported among white males (Figure 7). The number of reported cases decreased from 2008 to 2009 among white males (4 to 3), white females (1 to 0), and among black males (1 to 0). No cases were reported among black females in 2008 or 2009.

Early latent syphilis cases were only reported among white males (Figure 8). The number of reported early latent syphilis cases increased from 2008 to 2009 among white males (2 to 3), and decreased among white females (1 to 0). No cases were reported among black males or females in 2008 and 2009.

Figure 9. Reported gonorrhea cases, by race and sex, by age group at diagnosis, Northwest Region, 2009

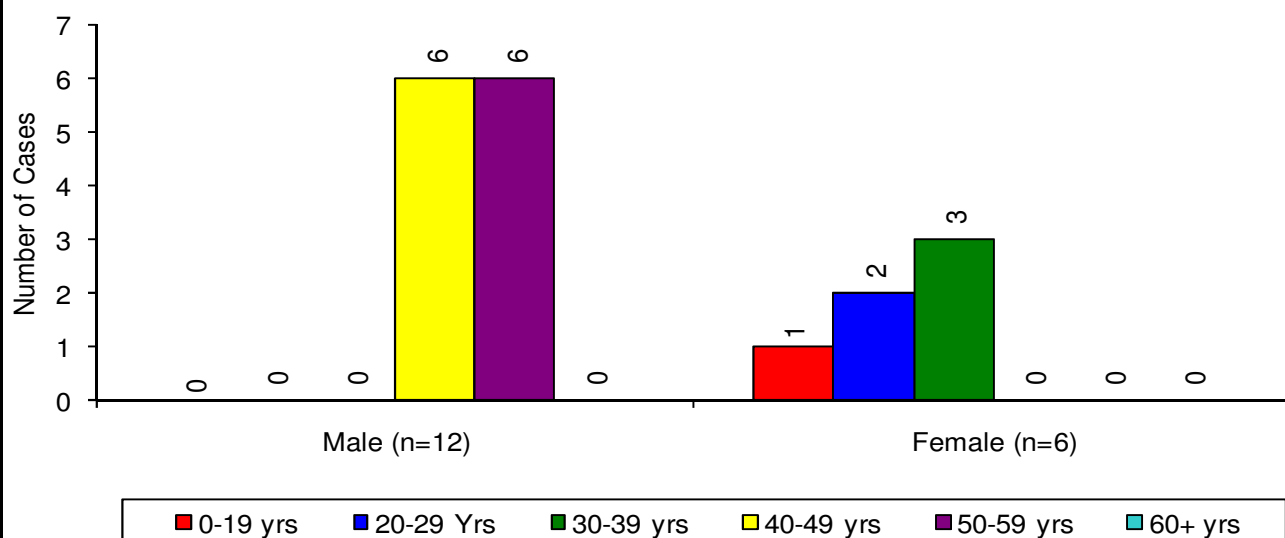
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

Figure 10. Reported chlamydia cases, by race and sex, by age group at diagnosis, Northwest Region, 2009

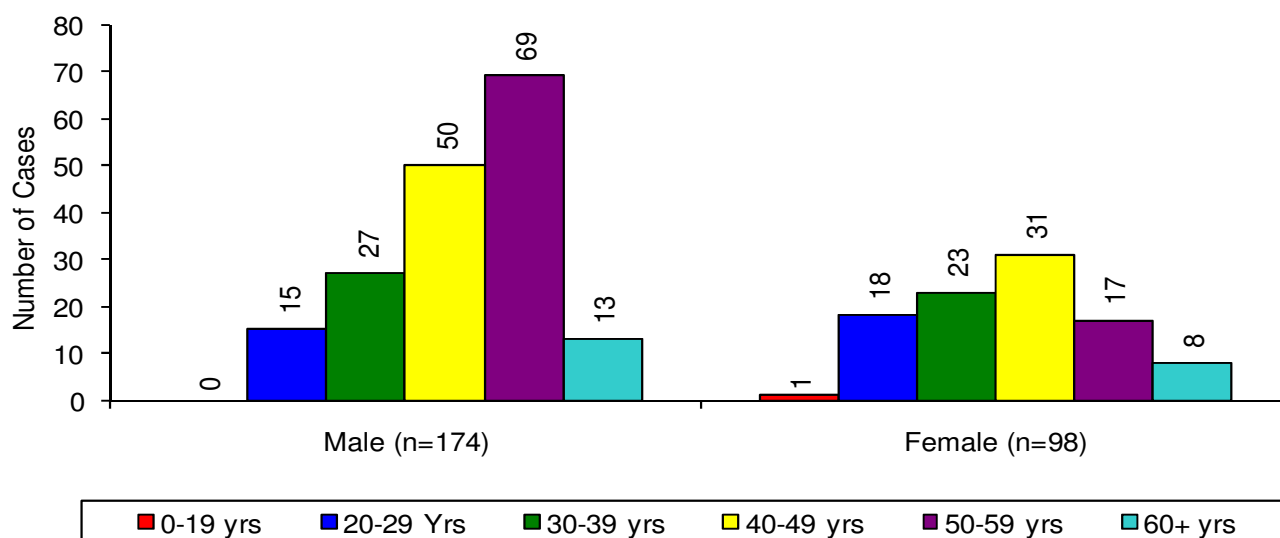
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

The largest number of gonorrhea cases was reported among white females (38), followed by black males (21) (Figure 9). The number of reported cases increased from 2008 to 2009 among all race/ethnicity and sex categories presented. The largest numbers of reported cases were diagnosed between 20-24 years of age among white males and black males. Among white females and black females, the largest numbers of reported cases were diagnosed between 15-19 years of age.

The largest numbers of chlamydia cases were reported among white females (383) and white males (96). The number of reported chlamydia cases increased from 2008 to 2009 among all white males and females. Among black females, the number of reported cases decreased from 62 reported cases in 2008 to 50 reported cases in 2009. Among black males, the number of reported cases decreased from 40 in 2008 to 35 in 2009. Among black females, individuals 15-19 years of age represented the largest number of reported cases. Among all other race/ethnicity and sex categories presented the largest number of reported cases was diagnosed between 20-24 years of age.

Figure 11. Reported Hepatitis B cases, by sex and by age group at diagnosis, Northwest Region, 2009

Note: Totals include persons whose age at diagnosis is unknown.

Figure 12. Reported Hepatitis C cases, by sex and by age group at diagnosis, Northwest Region, 2009

Note: Totals include persons whose age at diagnosis is unknown.

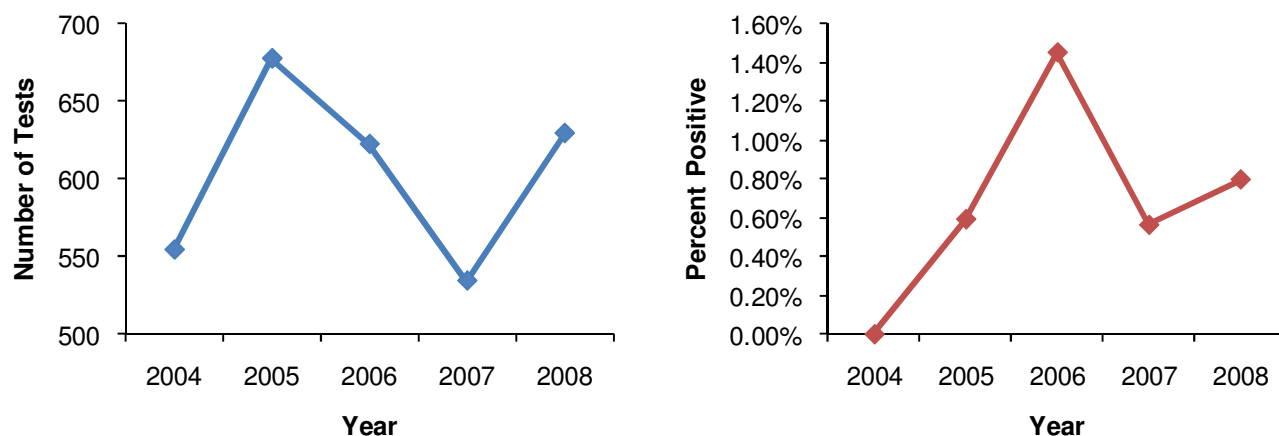
There were 18 reported cases of Hepatitis B in the Northwest HIV region during 2009 (Figure 11). Females represented 33% of reported Hepatitis B cases, which was lower than the proportion of females cases reported in Missouri overall (60%). There were differences in the age distribution of reported Hepatitis B cases by sex. Among males, cases were only reported among males 40 or more years of age at diagnosis. Cases were only reported among females less than 40 years of age at diagnosis.

In 2009, there were 272 Hepatitis C cases reported in the Northwest HIV region (Figure 12). Of the reported Hepatitis C cases, 64% were male. There were differences in the age distribution of reported Hepatitis C cases by sex. A greater proportion of males was diagnosed at 50 years of age or greater (47%) compared to females (26%). Among males the largest numbers of cases were between 50-59 years of age. Among females the largest numbers of cases were between 40-49 years of age.

Table 16. Number of HIV tests* and positive tests among counseling, testing and referral program sites, by current gender, race/ethnicity, age, exposure category, and test method, Northwest HIV Region, 2008			
	Total Tests N	Positive Tests N	%
Total	629	5	0.8%
Current Gender			
Male	355	4	1.1%
Female	270	1	0.4%
Transgender	1	0	0.0%
Unknown	3	0	0.0%
Race/Ethnicity			
White	417	4	1.0%
Black	156	1	0.6%
Hispanic	39	0	0.0%
Other/Unknown	17	0	0.0%
Age at Test			
<13	2	0	0.0%
13-18	76	0	0.0%
19-24	254	2	0.8%
25-44	230	2	0.9%
45-64	61	1	1.6%
65+	4	0	0.0%
Unknown	2	0	0.0%
Exposure Category			
MSM	64	4	6.3%
MSM/IDU	2	0	0.0%
IDU	8	0	0.0%
Heterosexual Contact**	22	0	0.0%
Presumed Heterosexual Contact***	227	1	0.4%
Unknown	306	0	0.0%
Test Method			
Rapid	237	2	0.8%
Conventional	391	3	0.8%
Unknown	1	0	0.0%
*Includes only tests where a result was available and where the individual did not self-report a previously positive HIV test and reported residing in the Northwest HIV Region.			
**Includes males and females who reported no injection drug use and reported high risk heterosexual behaviors with the opposite gender; corresponds with the CDC definition of high risk heterosexual contact.			
***Includes females who reported no history of injection drug use and reported sex with males without additional risk behaviors.			
Source: Missouri Counseling and Testing data			

Table 16 presents testing characteristics only among those tests performed at MDHSS counseling and testing sites among persons residing in the Northwest HIV region where the results were available and for tests where the individual did not report a previously positive HIV test; there were 629 tests that met these criteria. Overall, less than one percent of tests were positive for HIV disease.

The number of tests fluctuated from 2004-2008 in the Northwest HIV region among persons who were tested at MDHSS counseling and testing sites (Figure 13). The percent of tests that were positive increased from 2004-2006 and then decreased from 2006-2007 and remained generally steady through 2008. More targeted testing of high risk groups may explain the increase observed in the percent of positive cases from 2004-2006.

Figure 13. Number of HIV tests and percent positive results at Missouri counseling and testing sites, Northwest HIV Region, 2004-2008

Source: Missouri Counseling and Testing data

There were variations in the distributions of case management enrollment, ADAP enrollment, and persons living with HIV disease by current gender, race/ethnicity and current age (Table 17). Females, blacks, and persons 25-44 years of age tended to represent a greater proportion of persons enrolled in case management and ADAP compared to all persons living with HIV disease in the region. Differences in demographic information may exist because data regarding persons living with HIV disease were obtained from a different source (eHARS) than information on persons enrolled in case management or ADAP (FACTORS).

Table 17. Demographic characteristics of persons enrolled in HIV medical case management, persons enrolled in ADAP, and persons living with HIV disease, Northwest HIV Region, 2009

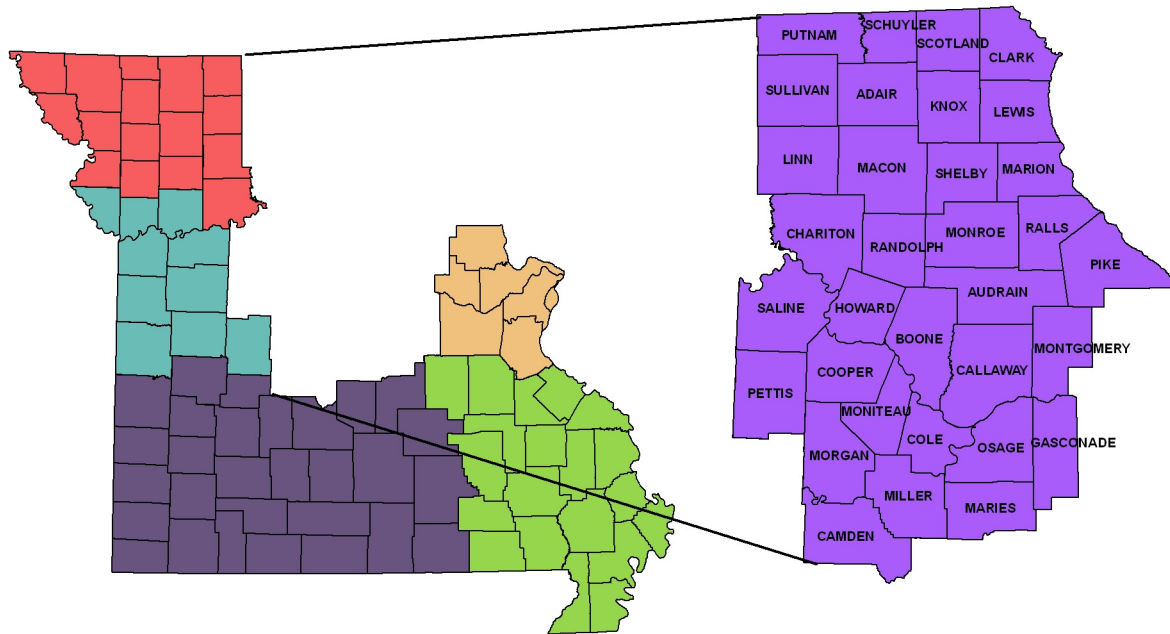
	<u>Enrolled in Case Management</u>		<u>Enrolled in ADAP*</u>		<u>Living HIV Disease</u>	
	N	%	N	%	N	%
Current Gender						
Male	53	75.7%	47	78.3%	97	84.3%
Female	17	24.3%	13	21.7%	17	14.8%
Transgender	0	0.0%	0	0.0%	1	0.9%
Unknown	0	0.0%	0	0.0%	0	0.0%
Total	70	100.0%	60	100.0%	115	100.0%
Race/Ethnicity						
White	55	78.6%	47	78.3%	92	80.0%
Black	13	18.6%	12	20.0%	17	14.8%
Hispanic	1	1.4%	1	1.7%	4	3.5%
Asian/Pacific Islander	0	0.0%	0	0.0%	1	0.9%
American Indian/Alaskan Native	0	0.0%	0	0.0%	1	0.9%
Two or More Races/Unknown	1	1.4%	0	0.0%	0	0.0%
Total	70	100.0%	60	100.0%	115	100.0%
Current Age[‡]						
<13	0	0.0%	0	0.0%	0	0.0%
13-18	0	0.0%	0	0.0%	0	0.0%
19-24	5	7.1%	4	6.7%	7	6.1%
25-44	33	47.1%	29	48.3%	43	37.4%
45-64	29	41.4%	26	43.3%	59	51.3%
65+	3	4.3%	1	1.7%	6	5.2%
Unknown	0	0.0%	0	0.0%	0	0.0%
Total	70	100.0%	60	100.0%	115	100.0%

*ADAP=AIDS Drug Assistance Program

‡As of December 31, 2009

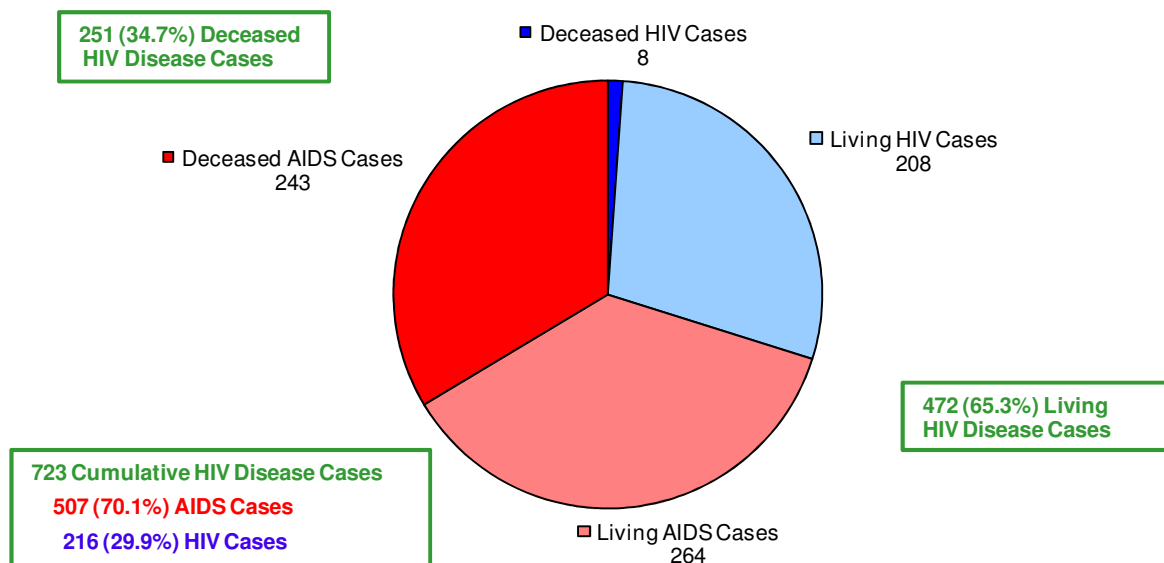
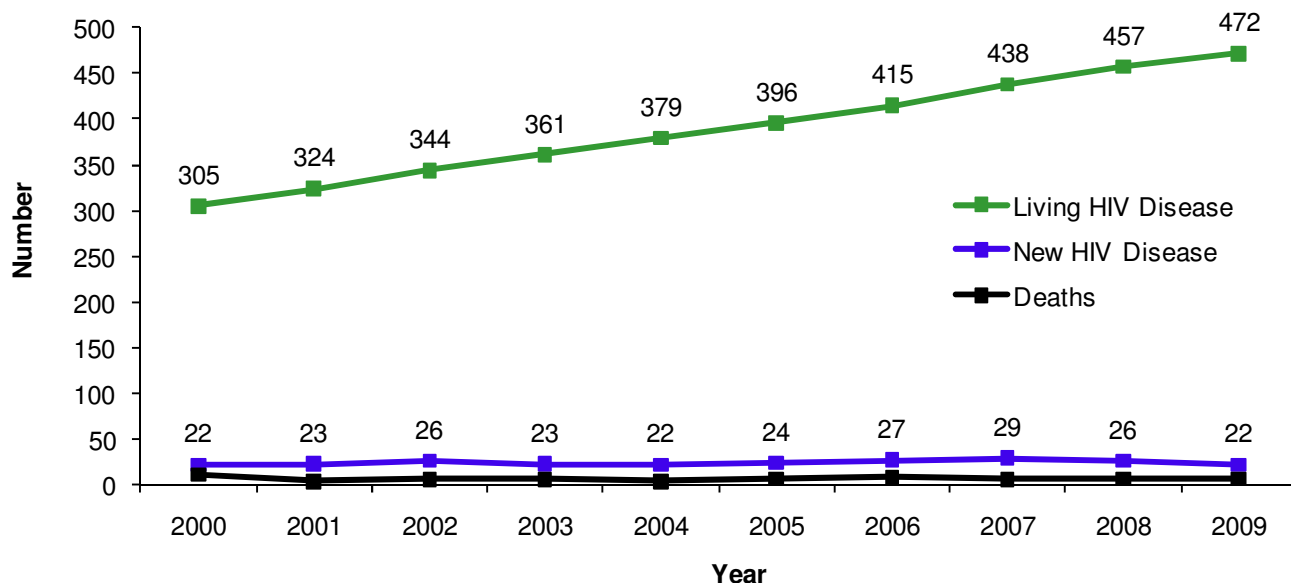
Source: FACTORS and eHARS

NORTH CENTRAL REGION



Population Estimates, North Central HIV Region, 2008

County	White		Black		Hispanic		Asian/Pacific Islander		American Indian/Alaskan Native		Two or More Races		Total
Adair County	23,301	93.4%	361	1.4%	494	2.0%	488	2.0%	66	0.3%	233	0.9%	24,943
Audrain County	23,072	88.6%	2,134	8.2%	372	1.4%	105	0.4%	85	0.3%	281	1.1%	26,049
Boone County	128,858	83.5%	13,304	8.6%	3,954	2.6%	4,990	3.2%	624	0.4%	2,635	1.7%	154,365
Callaway County	39,353	90.5%	2,278	5.2%	659	1.5%	392	0.9%	220	0.5%	562	1.3%	43,464
Camden County	38,882	95.6%	324	0.8%	637	1.6%	228	0.6%	192	0.5%	401	1.0%	40,664
Chariton County	7,357	95.1%	256	3.3%	53	0.7%	11	0.1%	14	0.2%	49	0.6%	7,740
Clark County	7,028	97.9%	20	0.3%	66	0.9%	5	0.1%	15	0.2%	46	0.6%	7,180
Cole County	63,072	84.9%	7,718	10.4%	1,378	1.9%	990	1.3%	239	0.3%	916	1.2%	74,313
Cooper County	15,442	88.1%	1,527	8.7%	243	1.4%	43	0.2%	65	0.4%	215	1.2%	17,535
Gasconade County	14,845	97.3%	68	0.4%	149	1.0%	33	0.2%	32	0.2%	134	0.9%	15,261
Howard County	8,940	90.1%	682	6.9%	121	1.2%	20	0.2%	36	0.4%	119	1.2%	9,918
Knox County	3,930	97.8%	5	0.1%	28	0.7%	4	0.1%	1	0.0%	52	1.3%	4,020
Lewis County	9,452	95.0%	270	2.7%	93	0.9%	25	0.3%	18	0.2%	93	0.9%	9,951
Linn County	12,126	96.4%	101	0.8%	165	1.3%	18	0.1%	52	0.4%	118	0.9%	12,580
Macon County	14,800	94.7%	387	2.5%	177	1.1%	27	0.2%	67	0.4%	163	1.0%	15,621
Maries County	8,639	95.5%	86	1.0%	150	1.7%	12	0.1%	50	0.6%	109	1.2%	9,046
Marion County	25,834	91.5%	1,448	5.1%	351	1.2%	101	0.4%	73	0.3%	418	1.5%	28,225
Miller County	24,031	96.3%	178	0.7%	323	1.3%	52	0.2%	111	0.4%	254	1.0%	24,949
Moniteau County	13,653	90.3%	611	4.0%	564	3.7%	51	0.3%	60	0.4%	182	1.2%	15,121
Monroe County	8,514	93.3%	369	4.0%	91	1.0%	24	0.3%	43	0.5%	86	0.9%	9,127
Montgomery County	11,154	94.5%	271	2.3%	116	1.0%	68	0.6%	35	0.3%	160	1.4%	11,804
Morgan County	20,051	96.1%	154	0.7%	232	1.1%	58	0.3%	132	0.6%	234	1.1%	20,861
Osage County	13,156	97.7%	38	0.3%	97	0.7%	21	0.2%	32	0.2%	121	0.9%	13,465
Pettis County	35,703	87.1%	1,224	3.0%	2,938	7.2%	312	0.8%	152	0.4%	677	1.7%	41,006
Pike County	15,977	86.5%	1,642	8.9%	557	3.0%	38	0.2%	48	0.3%	214	1.2%	18,476
Putnam County	4,772	98.1%	3	0.1%	48	1.0%	7	0.1%	5	0.1%	27	0.6%	4,862
Ralls County	9,517	96.8%	122	1.2%	89	0.9%	13	0.1%	20	0.2%	71	0.7%	9,832
Randolph County	22,972	89.3%	1,709	6.6%	393	1.5%	186	0.7%	122	0.5%	341	1.3%	25,723
Saline County	18,982	84.3%	1,188	5.3%	1,741	7.7%	173	0.8%	52	0.2%	369	1.6%	22,505
Schuyler County	4,013	97.6%	2	0.0%	30	0.7%	9	0.2%	13	0.3%	43	1.0%	4,110
Scotland County	4,700	98.0%	11	0.2%	42	0.9%	8	0.2%	8	0.2%	29	0.6%	4,798
Shelby County	6,209	96.8%	75	1.2%	51	0.8%	10	0.2%	21	0.3%	45	0.7%	6,411
Sullivan County	5,470	82.5%	11	0.2%	1,064	16.1%	16	0.2%	13	0.2%	55	0.8%	6,629
Region Total	663,805	89.6%	38,577	5.2%	17,466	2.4%	8,538	1.2%	2,716	0.4%	9,452	1.3%	740,554

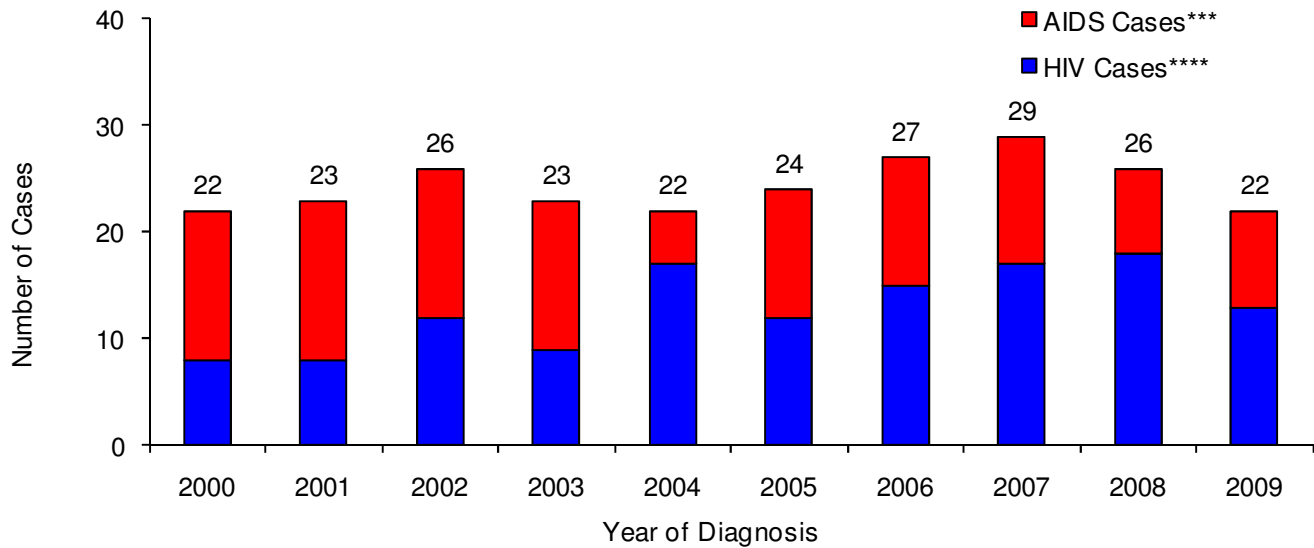
Figure 1. HIV disease cases (living and deceased), by current HIV vs. AIDS status, North Central HIV Region, 1982—2009**Figure 2. Living and new HIV disease cases and deaths by year*, North Central HIV Region, 2000—2009**

*For living HIV disease cases-the number of individuals living with HIV disease at the end of the year; For new HIV disease cases-the number of individuals newly diagnosed in the year, For HIV disease deaths-the number of individuals that died in the year.

From 1982 to 2009, there have been a total of 723 HIV disease cases diagnosed in the North Central HIV region and reported to MDHSS (Figure 1). Of the cumulative cases reported, 65% were still presumed to be living with HIV disease at the end of 2009. Among those living with HIV disease, 208 were classified as HIV cases at the end of 2009 and 264 were classified as AIDS cases.

At the end of 2009, there were 472 persons living with HIV disease whose most recent diagnosis occurred in the North Central HIV region (Figure 2). The number of people living with HIV disease increased every year from 2000 to 2009. There were 22 new HIV disease diagnoses in 2009. The number of new diagnoses and the number of deaths among persons with HIV disease has remained generally stable.

Figure 3. HIV disease cases, by current status* and year of diagnosis, North Central HIV Region, 2000—2009**



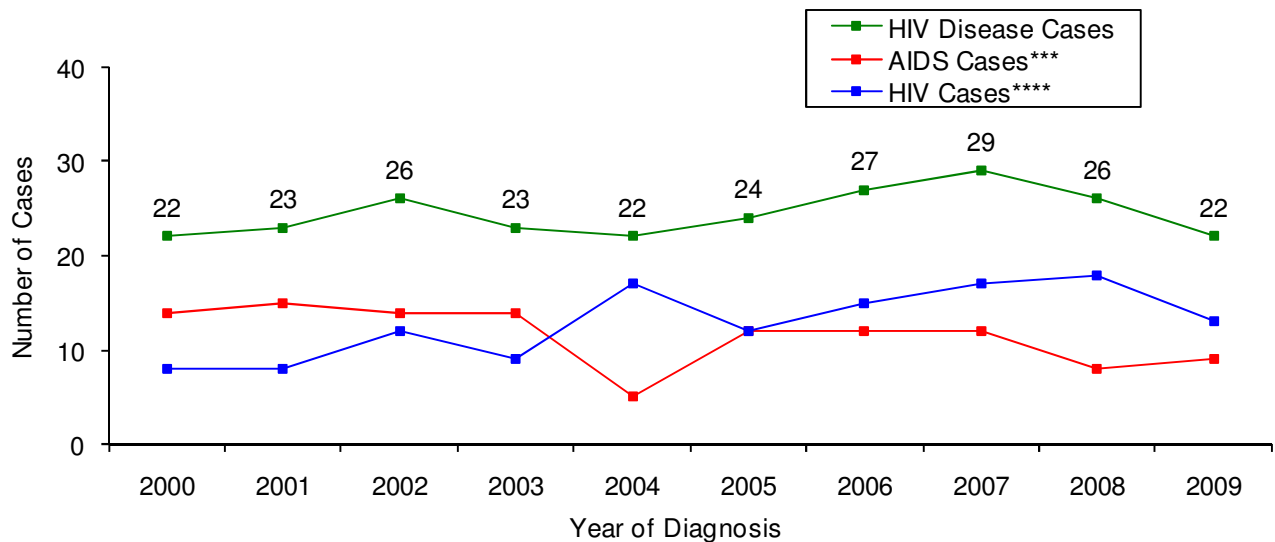
*HIV case vs. AIDS case

**Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2009.

Figure 4. Reported HIV disease cases, by current status* and year of diagnosis, North Central HIV Region, 2000—2009**



*HIV case vs. AIDS case

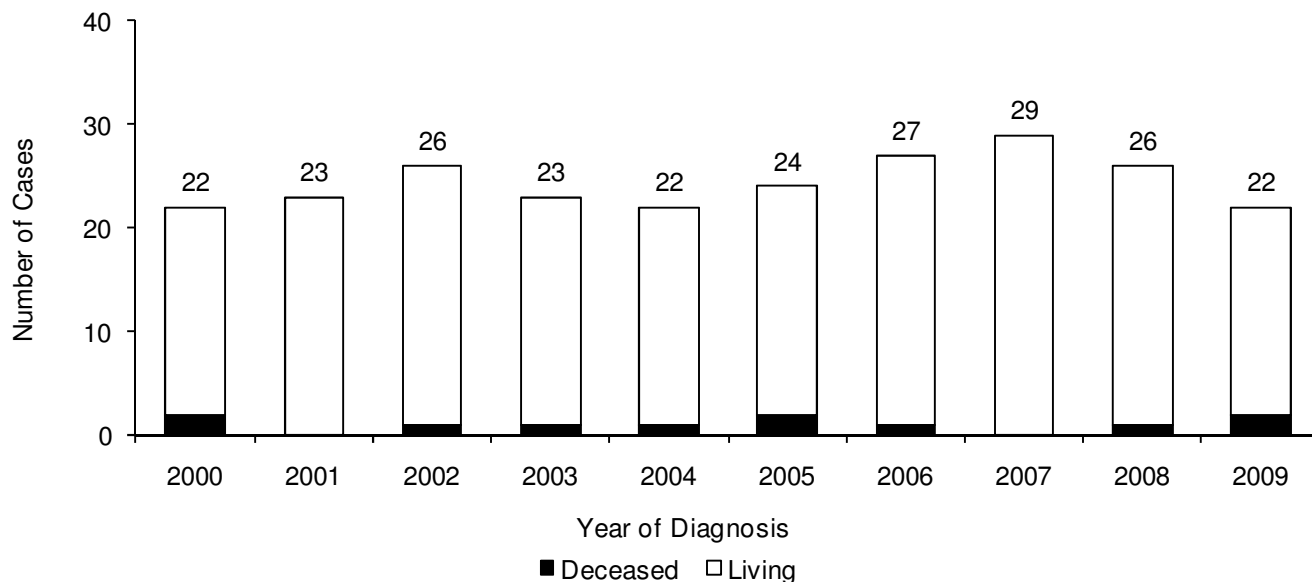
**Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2009.

The number of new diagnoses was generally stable, with slight fluctuations seen from 2000-2009 in the North Central HIV region (Figures 3 and 4). Differences in the number of persons sub-classified as AIDS cases each year are due to the progression of the disease over time.

Figure 5. Persons diagnosed with HIV disease by current vital status* and year of diagnosis, North Central HIV Region, 2000—2009**



*Vital status on December 31, 2009.

**Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

Of the 22 persons diagnosed with HIV disease in 2000, two (9%) were deceased by the end of 2009 (Figure 5). Among the 22 persons first diagnosed in 2009, two (9%) were deceased at the end of 2009. The difference in the proportion of cases that are deceased is due to the length of time individuals have been living with the disease. Among persons diagnosed in 2001 and 2007, no deaths have been reported to MDHSS.

Table 1. Living[†] HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and by current age, North Central HIV Region, 2009

	HIV*			AIDS**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	161	77.4%	43.9	203	76.9%	55.4	364	77.1%	99.3
Female	47	22.6%	12.6	61	23.1%	16.3	108	22.9%	28.9
Total	208	100.0%	28.1	264	100.0%	35.6	472	100.0%	63.7
Race/Ethnicity									
White	143	68.8%	21.5	181	68.6%	27.3	324	68.6%	48.8
Black	51	24.5%	132.2	68	25.8%	176.3	119	25.2%	308.5
Hispanic	11	5.3%	63.0	12	4.5%	68.7	23	4.9%	131.7
Asian/Pacific Islander	1	0.5%	11.7	1	0.4%	11.7	2	0.4%	23.4
American Indian/Alaskan Native	0	0.0%	0.0	1	0.4%	36.8	1	0.2%	36.8
Two or More Races/Unknown	2	1.0%	--	1	0.4%	--	3	0.6%	--
Total	208	100.0%	28.1	264	100.0%	35.6	472	100.0%	63.7
Race/Ethnicity-Males									
White Male	113	70.2%	34.7	148	72.9%	45.4	261	71.7%	80.1
Black Male	37	23.0%	176.7	44	21.7%	210.2	81	22.3%	386.9
Hispanic Male	9	5.6%	95.0	9	4.4%	95.0	18	4.9%	190.0
Asian/Pacific Islander Male	0	0.0%	0.0	1	0.5%	23.2	1	0.3%	23.2
American Indian/Alaskan Native Male	0	0.0%	0.0	1	0.5%	72.1	1	0.3%	72.1
Two or More Races/Unknown Male	2	1.2%	--	0	0.0%	--	2	0.5%	--
Total	161	100.0%	43.9	203	100.0%	55.4	364	100.0%	99.3
Race/Ethnicity-Females									
White Female	30	63.8%	8.9	33	54.1%	9.8	63	58.3%	18.6
Black Female	14	29.8%	79.4	24	39.3%	136.0	38	35.2%	215.4
Hispanic Female	2	4.3%	25.0	3	4.9%	37.5	5	4.6%	62.6
Asian/Pacific Islander Female	1	2.1%	23.7	0	0.0%	0.0	1	0.9%	23.7
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	0	0.0%	--	1	1.6%	--	1	0.9%	--
Total	47	100.0%	12.6	61	100.0%	16.3	108	100.0%	28.9
Current Age[‡]									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	3	1.4%	3.0	1	0.4%	1.0	4	0.8%	4.0
13-18	1	0.5%	1.7	2	0.8%	3.4	3	0.6%	5.1
19-24	9	4.3%	12.2	3	1.1%	4.1	12	2.5%	16.3
25-44	113	54.3%	57.9	96	36.4%	49.2	209	44.3%	107.2
45-64	78	37.5%	41.9	151	57.2%	81.2	229	48.5%	123.1
65+	4	1.9%	3.7	11	4.2%	10.3	15	3.2%	14.0
Total	208	100.0%	28.1	264	100.0%	35.6	472	100.0%	63.7

[†]Includes persons diagnosed with HIV disease in the North Central HIV Region who are currently living, regardless of current residence.

*Cases which remained HIV cases at the end of 2009.

**Cases classified as AIDS by December 31, 2009.

***The sum of HIV cases and AIDS cases.

****Per 100,000 population based on 2008 MDHSS estimates.

[‡]Based on age as of December 31, 2009.

Note: Percentages may not total due to rounding.

Table 2. Diagnosed HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and current age, North Central HIV Region, 2009

	HIV*			AIDS**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	11	84.6%	3.0	5	55.6%	1.4	16	72.7%	4.4
Female	2	15.4%	0.5	4	44.4%	1.1	6	27.3%	1.6
Total	13	100.0%	1.8	9	100.0%	1.2	22	100.0%	3.0
Race/Ethnicity									
White	9	69.2%	1.4	3	33.3%	0.5	12	54.5%	1.8
Black	4	30.8%	10.4	5	55.6%	13.0	9	40.9%	23.3
Hispanic	0	0.0%	0.0	1	11.1%	5.7	1	4.5%	5.7
Asian/Pacific Islander	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	13	100.0%	1.8	9	100.0%	1.2	22	100.0%	3.0
Race/Ethnicity-Males									
White Male	8	72.7%	2.5	1	20.0%	0.3	9	56.3%	2.8
Black Male	3	27.3%	14.3	4	80.0%	19.1	7	43.8%	33.4
Hispanic Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Asian/Pacific Islander Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Male	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	11	100.0%	3.0	5	100.0%	1.4	16	100.0%	4.4
Race/Ethnicity-Females									
White Female	1	50.0%	0.3	2	50.0%	0.6	3	50.0%	0.9
Black Female	1	50.0%	5.7	1	25.0%	5.7	2	33.3%	11.3
Hispanic Female	0	0.0%	0.0	1	25.0%	12.5	1	16.7%	12.5
Asian/Pacific Islander Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	2	100.0%	0.5	4	100.0%	1.1	6	100.0%	1.6
Current Age†									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
13-18	1	7.7%	1.7	0	0.0%	0.0	1	4.5%	1.7
19-24	3	23.1%	4.1	0	0.0%	0.0	3	13.6%	4.1
25-44	7	53.8%	3.6	3	33.3%	1.5	10	45.5%	5.1
45-64	2	15.4%	1.1	5	55.6%	2.7	7	31.8%	3.8
65+	0	0.0%	0.0	1	11.1%	0.9	1	4.5%	0.9
Total	13	100.0%	1.8	9	100.0%	1.2	22	100.0%	3.0

*HIV cases diagnosed during 2009 which remained HIV cases at the end of the year.

**AIDS cases initially diagnosed in 2009.

***The sum of newly diagnosed HIV cases and newly diagnosed AIDS cases. Does not include cases diagnosed prior to 2009 with HIV, which progressed to AIDS in 2009.

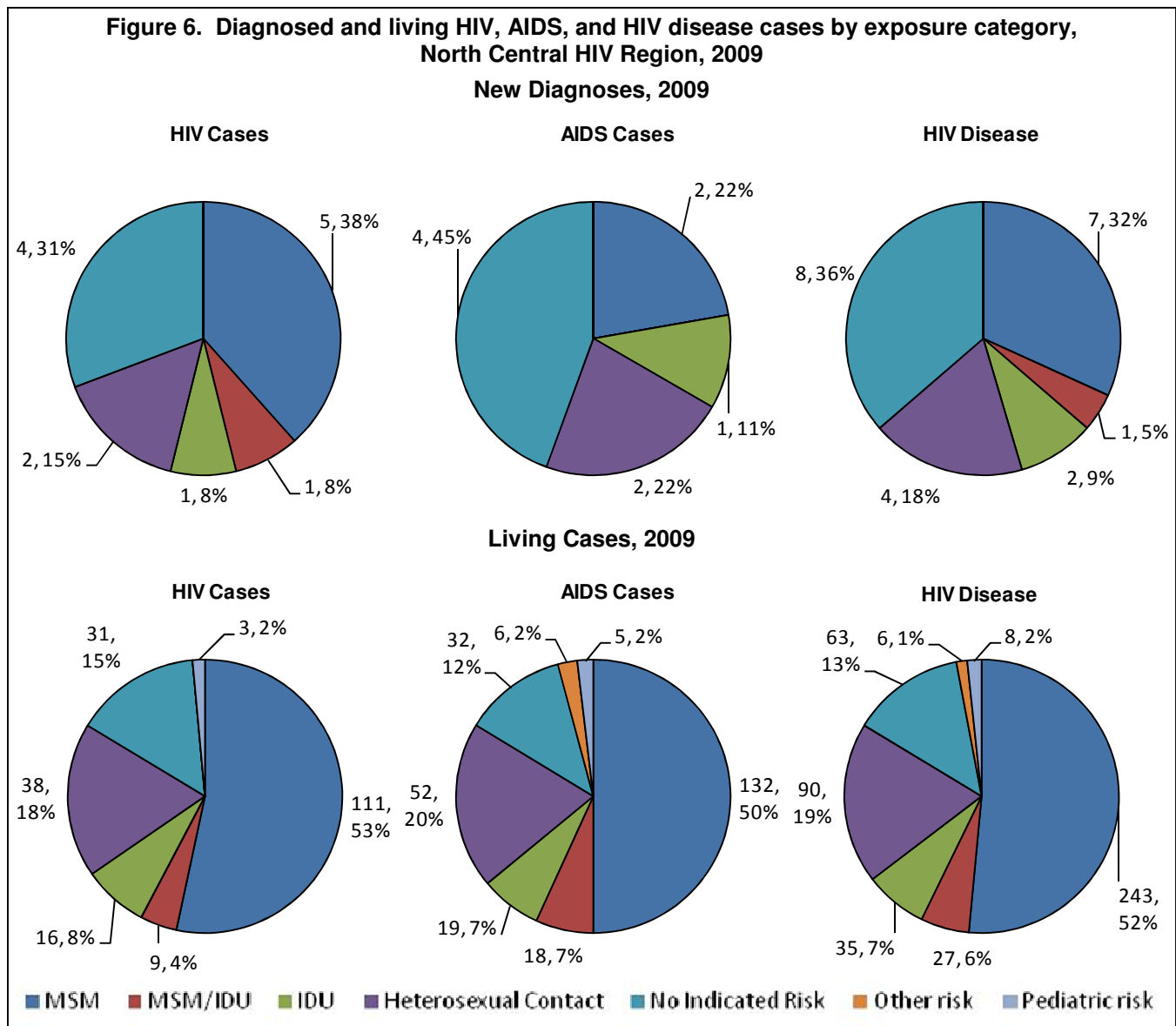
****Per 100,000 population based on 2008 MDHSS estimates.

†Based on age as of December 31, 2009.

Note: Percentages may not total due to rounding.

Of the 472 persons living with HIV at the end of 2009, 77% were males (Table 1). The rate of those living with HIV disease was 3.4 times greater among males than females. The difference in the rates between males and females was smaller than what was observed in Missouri overall. Although whites represented the largest proportion of living HIV disease cases (69%), the rate of those living with HIV disease was 6.3 times greater among blacks than whites. The rate was 2.7 times greater among Hispanics than whites. Among males, the rate of living cases was 4.8 times greater for blacks than whites, and 2.4 times greater for Hispanics than whites. Among females, the rate of those living with HIV disease was 11.6 times greater among blacks than whites, and 3.4 times greater among Hispanics than whites.

Of the 22 persons newly diagnosed with HIV disease in 2009, 41% were classified as AIDS cases by the end of 2009 (Table 2). Males represented 73% of new diagnoses. Whites represented the majority of all new HIV cases, and blacks represented the majority of all new AIDS cases diagnosed.



Among all categories, the largest proportion of cases with a known risk was attributed to MSM (Figure 6). The large proportion of cases with no indicated risk made trends difficult to interpret for all categories. The surveillance program examined methods to improve the identification and reporting of exposure category information.

Table 3. New and living HIV and AIDS cases and rates, by geographic area, North Central HIV Region, 2009

Geographic Area	HIV Cases						AIDS Cases					
	Diagnosed 2009*			Living			Diagnosed 2009**			Living		
	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***
Boone County	7	53.8%	4.5	98	47.1%	63.5	4	44.4%	2.6	121	45.8%	78.4
Cole County	2	15.4%	2.7	27	13.0%	36.3	1	11.1%	1.3	17	6.4%	22.9
Callaway County	1	7.7%	2.3	10	4.8%	23.0	0	0.0%	0.0	9	3.4%	20.7
Marion County	0	0.0%	0.0	3	1.4%	10.6	1	11.1%	3.5	8	3.0%	28.3
Pettis County	0	0.0%	0.0	7	3.4%	17.1	0	0.0%	0.0	14	5.3%	34.1
Gasconade County	0	0.0%	0.0	3	1.4%	19.7	1	11.1%	6.6	5	1.9%	32.8
Remainder of Region	3	23.1%	0.8	60	28.8%	15.6	2	22.2%	0.5	90	34.1%	23.4
NORTH CENTRAL HIV REGION TOTAL	13	100.0%	1.8	208	100.0%	28.1	9	100.0%	1.2	264	100.0%	35.6

*HIV cases diagnosed and reported to the Department during 2009 which remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

***Per 100,000 population based on 2008 MDHSS estimates.

Note: Percentages may not total due to rounding.

The number of persons newly diagnosed that remained classified as HIV cases at the end of 2009 was greatest in Boone County (7). The largest numbers of newly diagnosed persons classified as AIDS cases at the end of 2009 were also residents of Boone County (4) (Table 3). The rate of persons living with HIV disease among those classified as HIV cases and those classified as AIDS cases was highest in Boone County compared to other areas in the North Central HIV region.

Table 4. Newly diagnosed and living HIV and AIDS cases in men who have sex with men, by selected race/ethnicity, North Central HIV Region, 2009

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	4	80.0%	80	72.1%	0	0.0%	106	80.3%
Black	1	20.0%	23	20.7%	2	100.0%	21	15.9%
Hispanic	0	0.0%	7	6.3%	0	0.0%	4	3.0%
Other/Unknown	0	0.0%	1	0.9%	0	0.0%	1	0.8%
NORTH CENTRAL HIV REGION TOTAL	5	100.0%	111	100.0%	2	100.0%	132	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

Note: Percentages may not total due to rounding.

Table 5. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by current age group, North Central HIV Region, 2009

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	1	2.3%	0	0.0%	1	0.4%
19-24	4	2.2%	2	4.5%	0	0.0%	6	2.5%
25-44	74	39.8%	22	50.0%	4	36.4%	100	41.2%
45-64	101	54.3%	19	43.2%	7	63.6%	127	52.3%
65+	7	3.8%	0	0.0%	0	0.0%	9	3.7%
NORTH CENTRAL HIV REGION TOTAL	186	100.0%	44	100.0%	11	100.0%	243	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 6. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by geographic area, North Central HIV Region, 2009

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Boone County	101	77.1%	23	17.6%	6	4.6%	131	53.9%
Cole County	6	37.5%	9	56.3%	1	6.3%	16	6.6%
Remaining Counties	79	82.3%	12	12.5%	4	4.2%	96	39.5%
NORTH CENTRAL HIV REGION TOTAL	186	76.5%	44	18.1%	11	4.5%	243	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race/ethnicity in each area.

***Percentage of cases per area.

Note: Percentages may not total due to rounding.

There were a total of seven new HIV disease diagnoses attributed to men who have sex with men (MSM) in 2009 for the North Central HIV region (Table 4). Whites represented the largest number of total new HIV disease diagnoses. There were 243 living HIV disease cases attributed to MSM in the North Central HIV region. Whites represented a greater proportion among living AIDS cases (80%) compared to living HIV cases (72%).

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM (Table 5). Among white and Hispanic MSM living with HIV disease, the greatest proportions, 54% and 64% respectively, were between 45-64 years of age at the end of 2009. In contrast, only 43% of black MSM living with HIV disease were between 45-64 years old.

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for MSM (Table 6). A greater proportion of MSM living with HIV disease were black in Cole County (53%) compared to Boone County (18%) and the remainder on the North Central HIV region (13%).

Table 7. Newly diagnosed and living HIV and AIDS cases in men who have sex with men and inject drugs, by selected race/ethnicity, North Central HIV Region, 2009

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	1	100.0%	9	100.0%	0	--	14	77.8%
Black	0	--	0	0.0%	0	--	2	11.1%
Hispanic	0	0.0%	0	0.0%	0	--	2	11.1%
Other/Unknown	0	--	0	0.0%	0	--	0	0.0%
NORTH CENTRAL REGION TOTAL	1	100.0%	9	100.0%	0	--	18	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

Note: Percentages may not total due to rounding.

Table 8. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity, by current age group, North Central HIV Region, 2009

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	1	4.3%	0	0.0%	0	0.0%	1	3.7%
25-44	9	39.1%	1	50.0%	2	100.0%	12	44.4%
45-64	13	56.5%	1	50.0%	0	0.0%	14	51.9%
65+	0	0.0%	0	0.0%	0	0.0%	0	0.0%
NORTH CENTRAL HIV REGION TOTAL	23	100.0%	2	100.0%	2	100.0%	27	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 9. Living HIV disease cases in men who have sex with men and inject drugs, by geographic area, North Central HIV Region, 2009

Geographic Area	Cases	%
Boone County	12	44.4%
Cole County	2	7.4%
Marion County	2	7.4%
Pettis County	2	7.4%
Remaining Counties	9	33.3%
NORTH CENTRAL HIV REGION TOTAL	27	100.0%

There was one new HIV disease diagnosis attributed to men who have sex with men and inject drugs (MSM/IDU) in 2009 for the North Central HIV region (Table 7). There were 27 MSM/IDU living with HIV disease at the end of 2009 whose most recent diagnosis occurred in the North Central HIV region. The largest proportions of both living HIV and AIDS cases were white.

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM/IDU (Table 8). The number of living cases among whites was greatest among those 45-64 years of age. Among Hispanics whose infection was attributed to MSM/IDU, all living cases were between 25-44 years of age, although the number of cases was small.

The largest numbers of MSM/IDU living with HIV disease in the North Central HIV were most recently diagnosed in Boone County (12) (Table 9).

Table 10. Newly diagnosed and living HIV and AIDS cases in injecting drug users, by selected race/ethnicity and sex, North Central HIV Region, 2009

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	1	100.0%	9	56.3%	0	0.0%	6	31.6%
Black Male	0	0.0%	0	0.0%	0	0.0%	7	36.8%
Hispanic Male	0	0.0%	0	0.0%	0	0.0%	0	0.0%
White Female	0	0.0%	6	37.5%	0	0.0%	3	15.8%
Black Female	0	0.0%	1	6.3%	0	0.0%	3	15.8%
Hispanic Female	0	0.0%	0	0.0%	1	100.0%	0	0.0%
NORTH CENTRAL HIV REGION TOTAL[†]	1	100.0%	16	100.0%	1	100.0%	19	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

Table 11. Living HIV disease cases in injecting drug users, by selected race/ethnicity, by current age group, North Central HIV Region, 2009

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	1	6.7%	0	0.0%	0	0.0%	0	0.0%	1	2.9%
25-44	7	46.7%	2	28.6%	5	55.6%	1	25.0%	15	42.9%
45-64	6	40.0%	5	71.4%	4	44.4%	3	75.0%	18	51.4%
65+	1	6.7%	0	0.0%	0	0.0%	0	0.0%	1	2.9%
NORTH CENTRAL HIV REGION TOTAL	15	100.0%	7	100.0%	9	100.0%	4	100.0%	35	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 12. Living HIV disease cases in injecting drug users, by geographic area, North Central HIV Region, 2009

Geographic Area	Cases	%
Boone County	13	37.1%
Cole County	4	11.4%
Marion County	2	5.7%
Pettis County	1	2.9%
Remaining Counties	15	42.9%
NORTH CENTRAL HIV REGION TOTAL	35	100.0%

There were two new HIV disease diagnoses attributed to injecting drug users (IDU) in 2009 for the North Central HIV region (Table 10). There were 35 living HIV disease cases attributed to IDU at the end of 2009 in the North Central HIV region. Of persons living with HIV disease, 54% were classified as AIDS at the end of 2009. The largest proportion of living HIV cases were white males (56%), while black males represented the largest proportion of living AIDS cases (37%).

Overall, the largest numbers of persons living with HIV disease among IDU in the North Central HIV region were between 45-64 years of age at the end of 2009 (18), and were followed closely by individuals 25-44 years old (15) (Table 11).

The largest numbers of IDU living with HIV disease in the North Central HIV were most recently diagnosed in Boone County (13) (Table 12).

Table 13. Newly diagnosed and living HIV and AIDS cases in heterosexual contacts, by selected race/ethnicity and sex, North Central HIV Region, 2009

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	1	50.0%	6	15.8%	0	0.0%	6	11.5%
Black Male	0	0.0%	4	10.5%	1	50.0%	6	11.5%
Hispanic Male	0	0.0%	0	0.0%	0	0.0%	0	0.0%
White Female	0	0.0%	18	47.4%	1	50.0%	27	51.9%
Black Female	1	50.0%	7	18.4%	0	0.0%	9	17.3%
Hispanic Female	0	0.0%	1	2.6%	0	0.0%	2	3.8%
NORTH CENTRAL HIV REGION TOTAL†	2	100.0%	38	100.0%	2	100.0%	52	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

Table 14. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and sex, by current age group, North Central HIV Region, 2009

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
25-44	5	41.7%	5	50.0%	24	53.3%	9	56.3%	48	53.3%
45-64	7	58.3%	5	50.0%	19	42.2%	7	43.8%	40	44.4%
65+	0	0.0%	0	0.0%	2	4.4%	0	0.0%	2	2.2%
NORTH CENTRAL HIV REGION TOTAL	12	100.0%	10	100.0%	45	100.0%	16	100.0%	90	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 15. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity, by geographic area, North Central HIV Region, 2009

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Boone County	17	54.8%	13	41.9%	1	3.2%	31	34.4%
Cole County	8	57.1%	5	35.7%	0	0.0%	14	15.6%
Remaining Counties	32	71.1%	8	17.8%	2	4.4%	45	50.0%
NORTH CENTRAL HIV REGION TOTAL	57	63.3%	26	28.9%	3	3.3%	90	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race in each area.

***Percentage of cases per area.

Note: Percentages may not total due to rounding.

There were a total of four new HIV disease diagnoses attributed to heterosexual contact in 2009 for the North Central HIV region (Table 13). There were 90 persons living with HIV disease attributed to heterosexual contact at the end of 2009 in the North Central HIV region. White females represented the largest proportion of both living HIV and AIDS cases among heterosexual contact cases.

At the end of 2009, the majority of heterosexual contact cases living with HIV disease were between 25-44 years of age among black males and black females (Table 14). Among white males, the majority were 45-64 years of age. An equal number of white females living with HIV disease attributed to heterosexual contact were between 25-44 and 45-64 years of age.

There were differences in the distribution of persons living with HIV disease by race/ethnicity among the geographic areas for heterosexual contact cases (Table 15). In Boone County, black heterosexual contact cases comprised a larger proportion of persons living with HIV disease compared to other areas.

Figure 7. Reported P&S syphilis cases, by race and sex, by age group at diagnosis, North Central Region, 2009

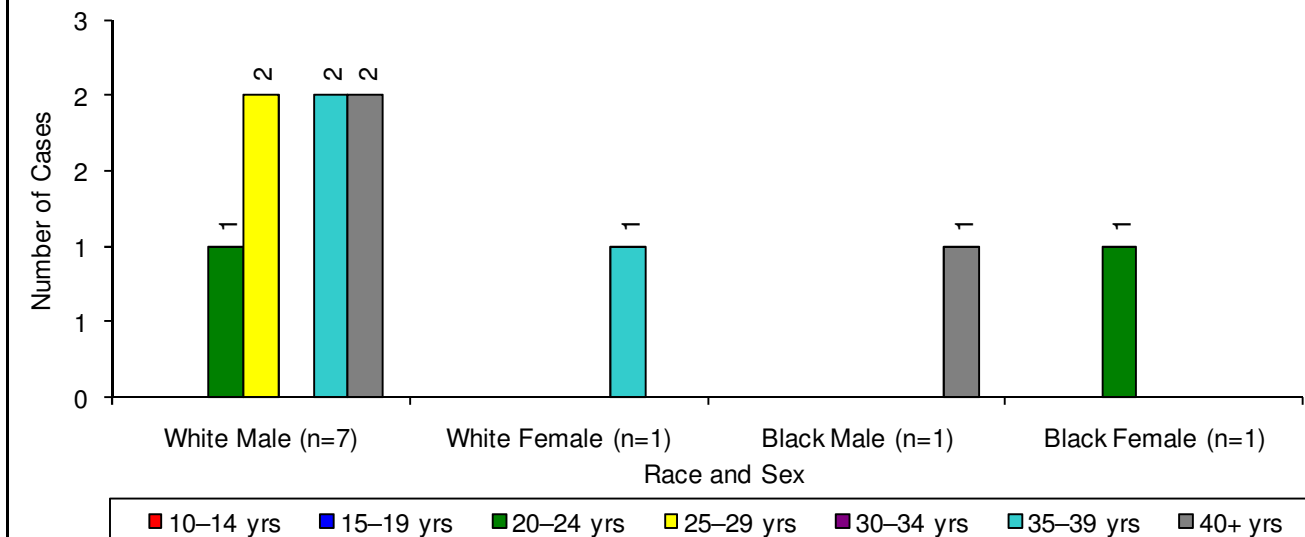
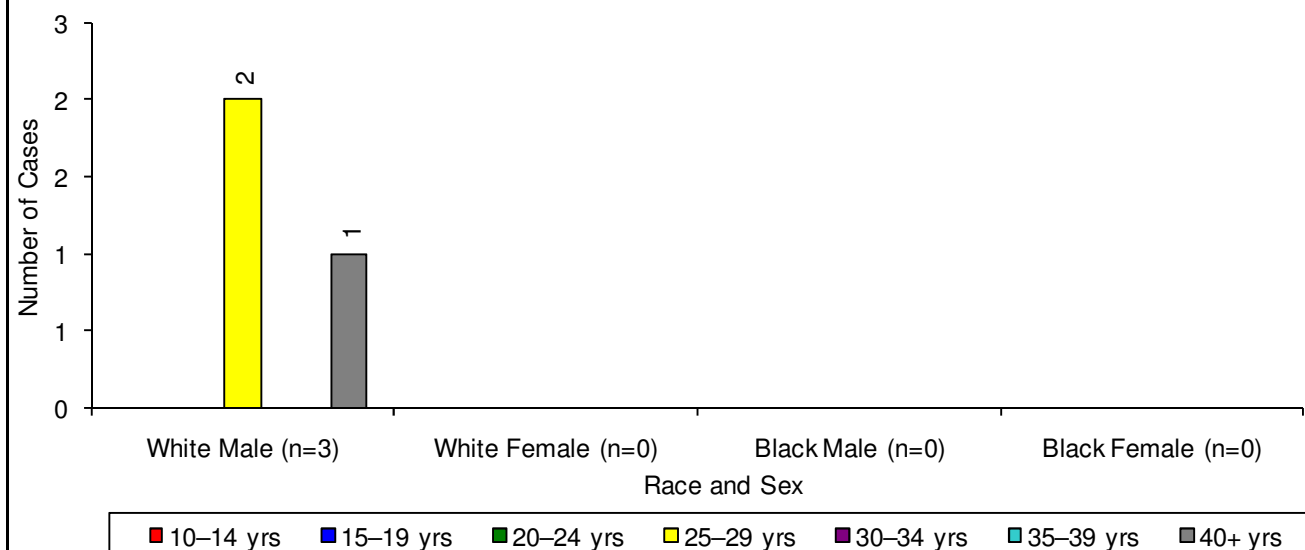
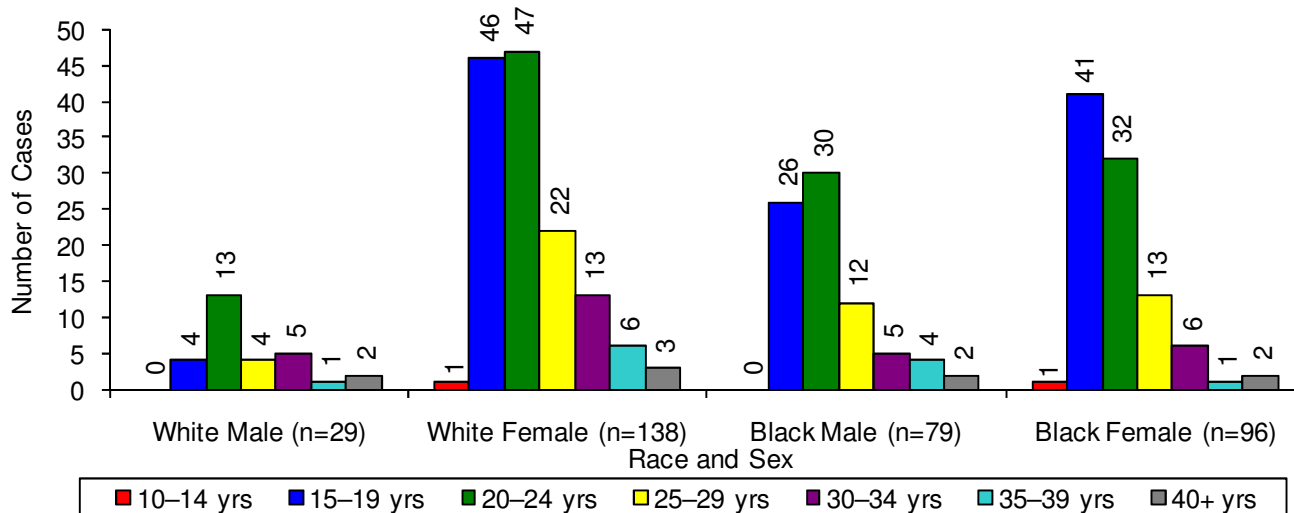


Figure 8. Reported early latent syphilis cases, by race and sex, by age group at diagnosis, North Central Region, 2009

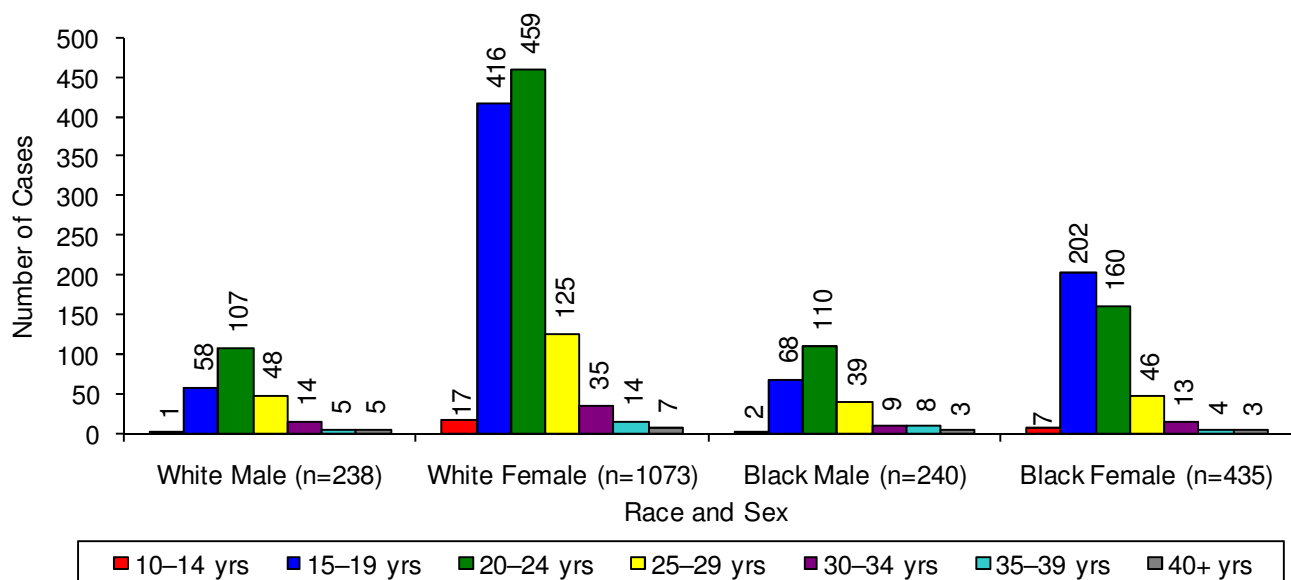


The largest number of P&S syphilis cases was reported among white males (7) (Figure 7). The number of reported cases increased from 2008 to 2009 among white females (0 to 1) and black females (0 to 1), and decreased among black males (2 to 1) and white males (8 to 7).

Early latent syphilis cases were only reported among white males in 2009 (Figure 8). The number of reported early latent syphilis cases decreased from 2008 to 2009 among white males (6 to 3) and black females (1 to 0), and remained the same among white females and black males.

Figure 9. Reported gonorrhea cases, by race and sex, by age group at diagnosis, North Central Region, 2009

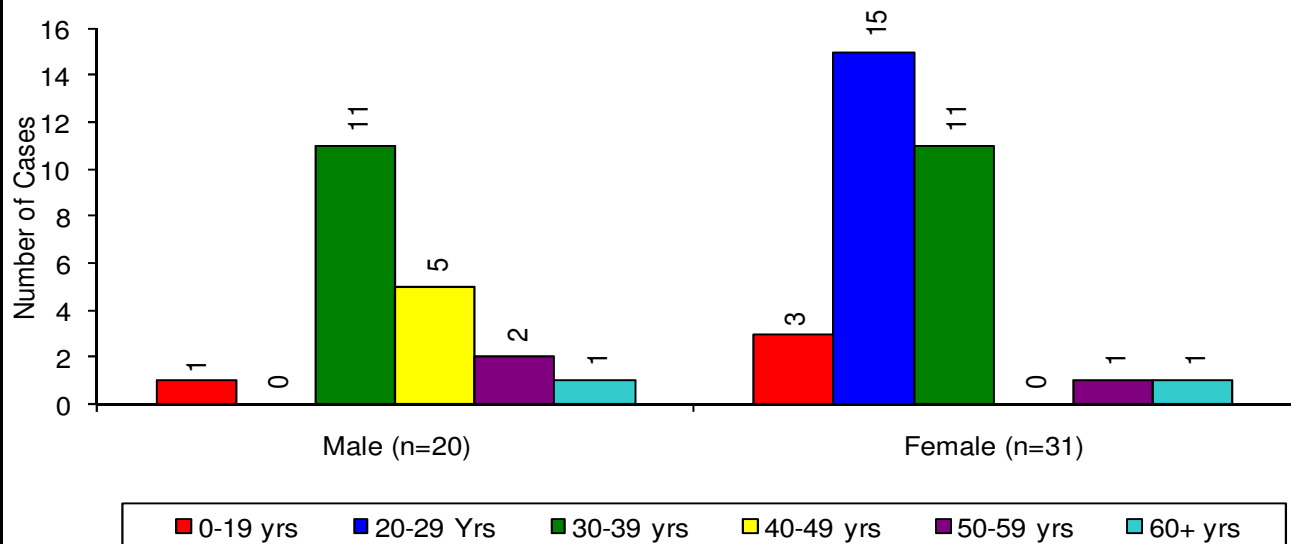
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

Figure 10. Reported chlamydia cases, by race and sex, by age group at diagnosis, North Central Region, 2009

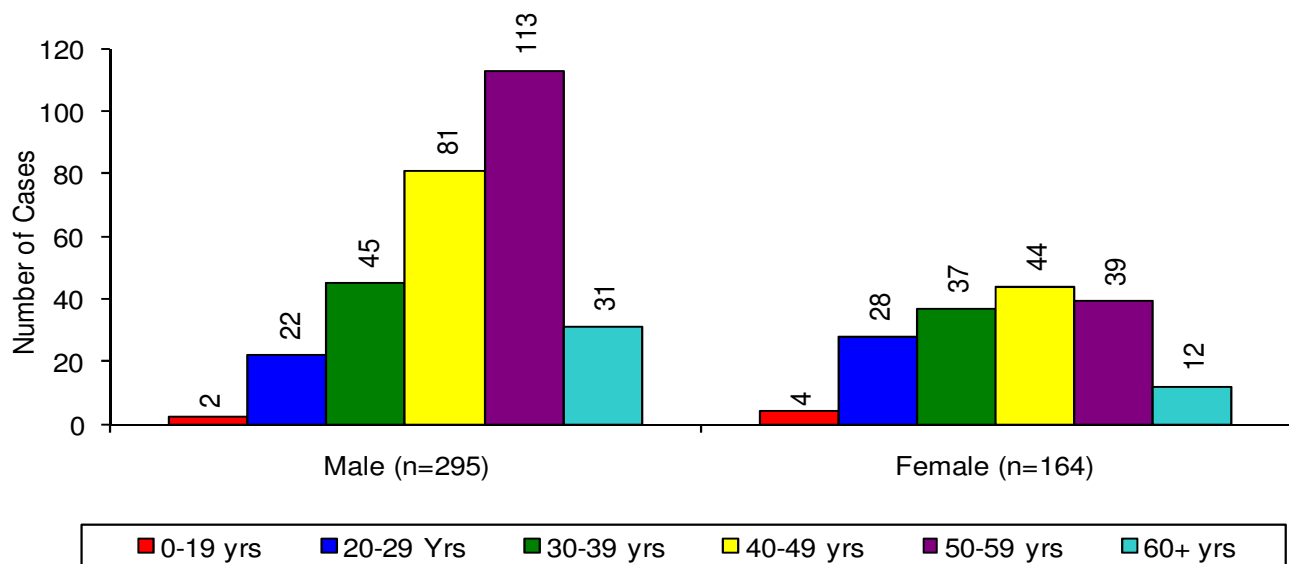
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

The largest number of gonorrhea cases was reported among white females (138) followed by black females (96) (Figure 9). The number of reported cases decreased from 2008 to 2009 among all race/ethnicity and sex categories presented. Among black females, the largest number of reported cases was diagnosed between 15-19 years of age. Among all other race/ethnicity and sex categories presented the largest number of reported cases was diagnosed between 20-24 years of age.

The largest number of chlamydia cases was reported among white females (1,073) followed by black females (435). The number of reported chlamydia cases decreased from 2008 to 2009 among white males (248 to 238), but increased among all other race/ethnicity and sex categories presented. Among black females, individuals 15-19 years of age represented the largest number of reported cases. Among all other race/ethnicity and sex categories presented the largest number of reported cases was diagnosed between 20-24 years of age.

Figure 11. Reported Hepatitis B cases, by sex and by age group at diagnosis, North Central Region, 2009

Note: Totals include persons whose age at diagnosis is unknown.

Figure 12. Reported Hepatitis C cases, by sex and by age group at diagnosis, North Central Region, 2009

Note: Totals include persons whose age at diagnosis is unknown.

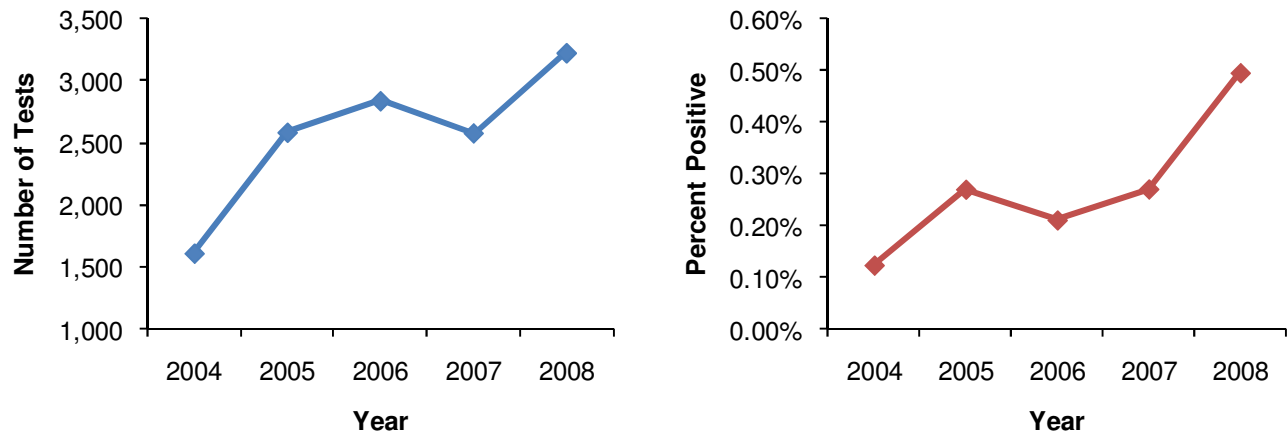
There were 51 reported cases of Hepatitis B in the North Central HIV region during 2009 (Figure 11). Females represented 61% of reported Hepatitis B cases. There were differences in the age distribution of reported Hepatitis B cases by sex. Persons 30-39 years of age represented the largest proportion of male cases, and those 20-29 accounted for the largest proportion of female cases.

In 2009, there were 459 Hepatitis C cases reported in the North Central HIV region (Figure 12). Of the reported Hepatitis C cases, 64% were male. There were differences in the age distribution of reported Hepatitis C cases by sex. A greater proportion of females were diagnosed at less than 40 years of age (42%) compared to males (23%).

Table 16. Number of HIV tests* and positive tests among counseling, testing and referral program sites, by current gender, race/ethnicity, age, exposure category, and test method, North Central HIV Region, 2008			
	Total Tests N	Positive Tests N	%
Total	3,225	16	0.5%
Current Gender			
Male	1,565	14	0.9%
Female	1,644	2	0.1%
Transgender	1	0	0.0%
Unknown	15	0	0.0%
Race/Ethnicity			
White	1,693	9	0.5%
Black	1,303	7	0.5%
Hispanic	133	0	0.0%
Other/Unknown	96	0	0.0%
Age at Test			
<13	3	0	0.0%
13-18	244	0	0.0%
19-24	1,281	6	0.5%
25-44	1,282	7	0.5%
45-64	377	3	0.8%
65+	28	0	0.0%
Unknown	10	0	0.0%
Exposure Category			
MSM	352	12	3.4%
MSM/IDU	4	0	0.0%
IDU	84	0	0.0%
Heterosexual Contact**	85	1	1.2%
Presumed Heterosexual Contact***	1,457	1	0.1%
Unknown	1,243	2	0.2%
Test Method			
Rapid	673	10	1.5%
Conventional	2,548	6	0.2%
Unknown	4	0	0.0%
*Includes only tests where a result was available and where the individual did not self-report a previously positive HIV test and reported residing in the North Central HIV Region.			
**Includes males and females who reported no injection drug use and reported high risk heterosexual behaviors with the opposite gender; corresponds with the CDC definition of high risk heterosexual contact.			
***Includes females who reported no history of injection drug use and reported sex with males without additional risk behaviors.			
Source: Missouri Counseling and Testing data			

Table 16 presents testing characteristics only among those tests performed at MDHSS counseling and testing sites among persons residing in the North Central HIV region where the results were available and for tests where the individual did not report a previously positive HIV test; there were 3,225 tests that met these criteria. Overall, less than one percent of tests were positive for HIV disease.

The number of tests and positive results generally increased from 2004-2008 among persons residing in the North Central HIV region who were tested at MDHSS counseling and testing sites (Figure 13). More targeted testing of high risk groups may explain the increase observed in the percent of positive cases. A true increase in HIV disease burden may also explain the increase in positive test results.

Figure 13. Number of HIV tests and percent positive results at Missouri counseling and testing sites, North Central HIV Region, 2004-2008

Source: Missouri Counseling and Testing data

There were variations in the distributions of case management enrollment, ADAP enrollment, and persons living with HIV disease by current gender, race/ethnicity and current age (Table 17). Males, minorities, and persons 25-44 years of age tended to represent a greater proportion of persons enrolled in case management and ADAP compared to all persons living with HIV disease in the region. Differences in demographic information may exist because data regarding persons living with HIV disease were obtained from a different source (eHARS) than information on persons enrolled in case management or ADAP (FACTORS).

Table 17. Demographic characteristics of persons enrolled in HIV medical case management, persons enrolled in ADAP, and persons living with HIV disease, North Central HIV Region, 2009

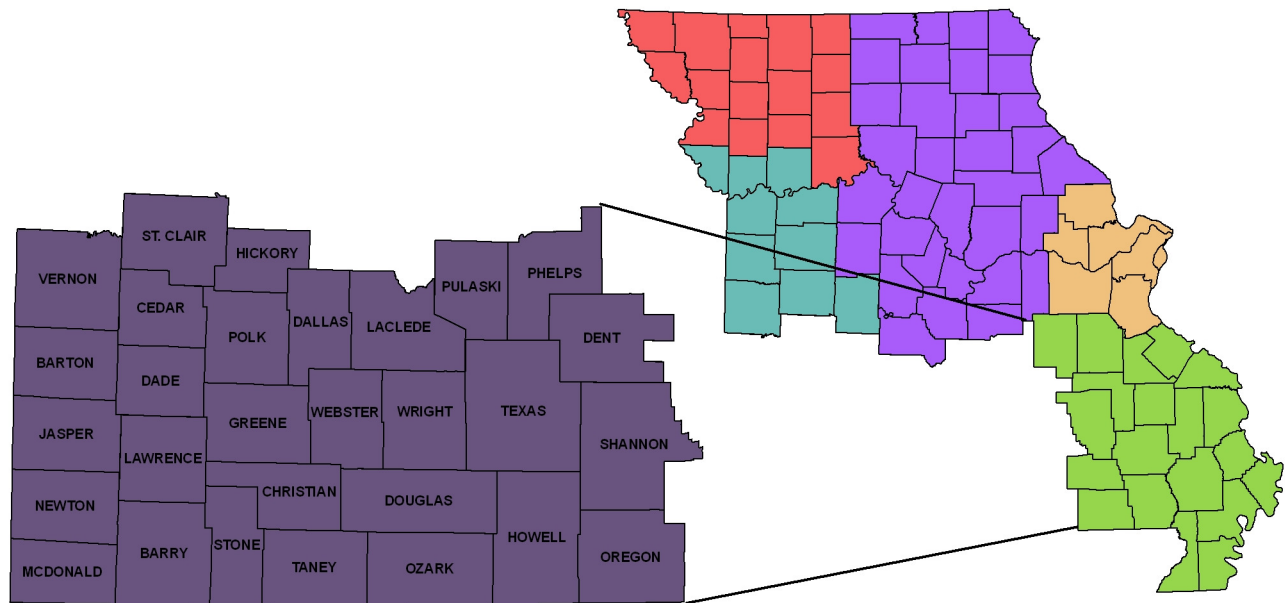
	<u>Enrolled in Case Management</u>		<u>Enrolled in ADAP*</u>		<u>Living HIV Disease</u>	
	N	%	N	%	N	%
Current Gender						
Male	219	80.2%	131	82.4%	364	77.1%
Female	54	19.8%	28	17.6%	108	22.9%
Transgender	0	0.0%	0	0.0%	0	0.0%
Unknown	0	0.0%	0	0.0%	0	0.0%
Total	273	100.0%	159	100.0%	472	100.0%
Race/Ethnicity						
White	179	65.6%	92	57.9%	324	68.6%
Black	74	27.1%	50	31.4%	119	25.2%
Hispanic	16	5.9%	14	8.8%	23	4.9%
Asian/Pacific Islander	1	0.4%	1	0.6%	2	0.4%
American Indian/Alaskan Native	3	1.1%	2	1.3%	1	0.2%
Two or More Races/Unknown	0	0.0%	0	0.0%	3	0.6%
Total	273	100.0%	159	100.0%	472	100.0%
Current Age[‡]						
<13	0	0.0%	0	0.0%	4	0.8%
13-18	2	0.7%	0	0.0%	3	0.6%
19-24	7	2.6%	5	3.1%	12	2.5%
25-44	126	46.2%	88	55.3%	209	44.3%
45-64	136	49.8%	64	40.3%	229	48.5%
65+	2	0.7%	2	1.3%	15	3.2%
Unknown	0	0.0%	0	0.0%	0	0.0%
Total	273	100.0%	159	100.0%	472	100.0%

*ADAP=AIDS Drug Assistance Program

‡As of December 31, 2009

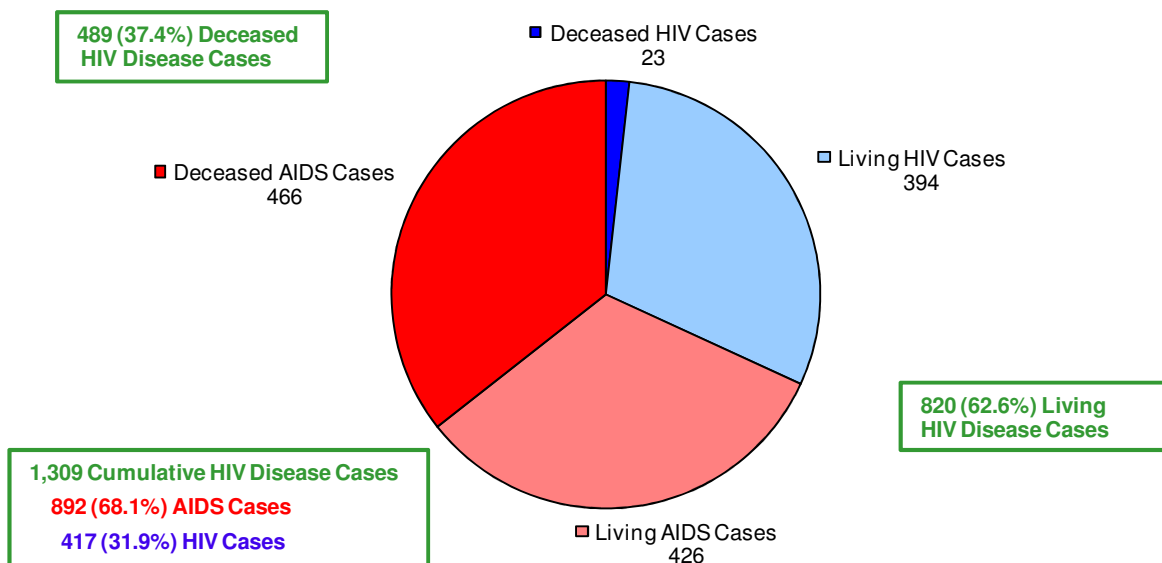
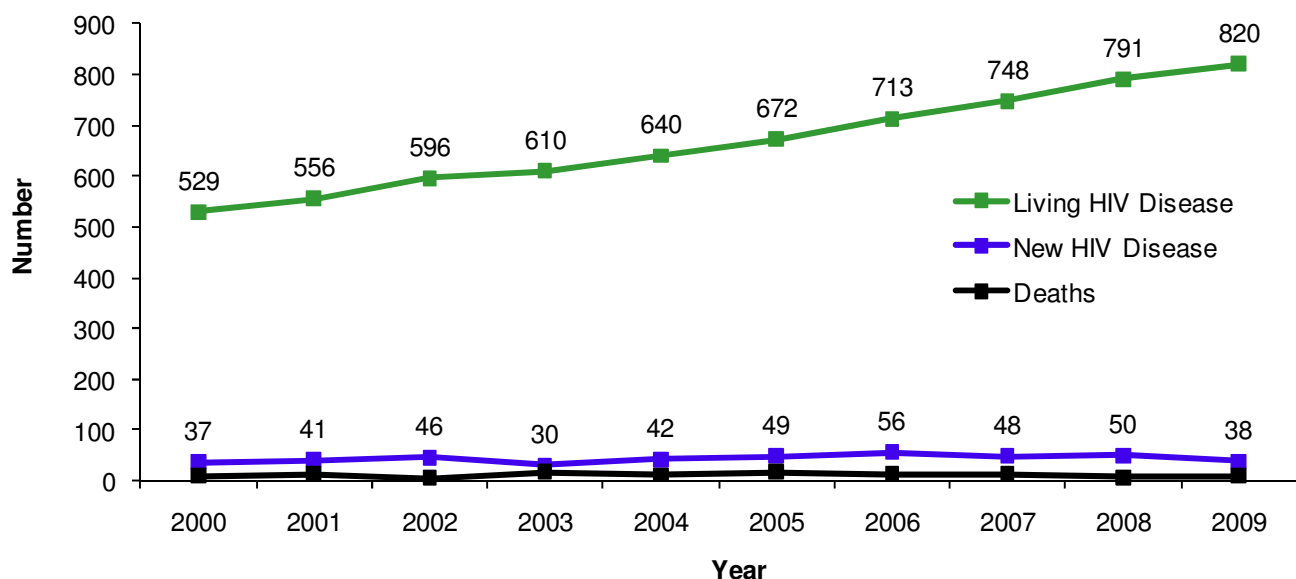
Source: FACTORS and eHARS

SOUTHWEST REGION



Population Estimates, Southwest HIV Region, 2008

County	White		Black		Hispanic		Asian/Pacific Islander		American Indian/Alaskan Native		Two or More Races		Total
Barry County	32,020	88.2%	149	0.4%	3,042	8.4%	338	0.9%	309	0.9%	443	1.2%	36,301
Barton County	11,908	95.0%	52	0.4%	219	1.7%	50	0.4%	106	0.8%	196	1.6%	12,531
Cedar County	12,997	95.2%	72	0.5%	230	1.7%	73	0.5%	98	0.7%	182	1.3%	13,652
Christian County	71,309	94.5%	673	0.9%	1,814	2.4%	338	0.4%	376	0.5%	969	1.3%	75,479
Dade County	7,076	95.4%	45	0.6%	108	1.5%	25	0.3%	59	0.8%	105	1.4%	7,418
Dallas County	16,014	95.1%	90	0.5%	310	1.8%	58	0.3%	130	0.8%	242	1.4%	16,844
Dent County	14,552	95.7%	105	0.7%	185	1.2%	48	0.3%	112	0.7%	197	1.3%	15,199
Douglas County	12,849	95.6%	33	0.2%	149	1.1%	30	0.2%	127	0.9%	250	1.9%	13,438
Greene County	243,024	91.0%	7,167	2.7%	7,140	2.7%	3,600	1.3%	1,656	0.6%	4,357	1.6%	266,944
Hickory County	8,729	96.5%	7	0.1%	105	1.2%	9	0.1%	60	0.7%	138	1.5%	9,048
Howell County	37,046	95.0%	194	0.5%	627	1.6%	170	0.4%	364	0.9%	599	1.5%	39,000
Jasper County	103,026	88.2%	1,978	1.7%	6,953	6.0%	1,107	0.9%	1,358	1.2%	2,391	2.0%	116,813
Laclede County	33,715	94.9%	316	0.9%	667	1.9%	176	0.5%	165	0.5%	485	1.4%	35,524
Lawrence County	34,625	91.7%	172	0.5%	2,036	5.4%	153	0.4%	281	0.7%	490	1.3%	37,757
McDonald County	18,170	79.9%	101	0.4%	3,006	13.2%	204	0.9%	604	2.7%	646	2.8%	22,731
Newton County	50,311	89.6%	542	1.0%	2,044	3.6%	891	1.6%	1,114	2.0%	1,218	2.2%	56,120
Oregon County	9,521	92.8%	38	0.4%	159	1.5%	15	0.1%	306	3.0%	225	2.2%	10,264
Ozark County	8,844	95.8%	33	0.4%	121	1.3%	9	0.1%	65	0.7%	155	1.7%	9,227
Phelps County	38,883	92.1%	863	2.0%	706	1.7%	848	2.0%	258	0.6%	647	1.5%	42,205
Polk County	28,946	95.2%	227	0.7%	539	1.8%	180	0.6%	209	0.7%	303	1.0%	30,404
Pulaski County	33,430	75.0%	4,797	10.8%	3,531	7.9%	1,157	2.6%	443	1.0%	1,188	2.7%	44,546
Shannon County	7,880	93.6%	46	0.5%	119	1.4%	6	0.1%	161	1.9%	211	2.5%	8,423
St. Clair County	8,881	95.8%	55	0.6%	121	1.3%	22	0.2%	80	0.9%	111	1.2%	9,270
Stone County	30,170	95.6%	163	0.5%	579	1.8%	89	0.3%	212	0.7%	338	1.1%	31,551
Taney County	43,527	92.6%	456	1.0%	1,758	3.7%	328	0.7%	348	0.7%	606	1.3%	47,023
Texas County	22,782	92.6%	662	2.7%	358	1.5%	101	0.4%	239	1.0%	456	1.9%	24,598
Vernon County	19,123	95.6%	172	0.9%	234	1.2%	93	0.5%	177	0.9%	210	1.0%	20,009
Webster County	34,534	94.7%	488	1.3%	689	1.9%	139	0.4%	216	0.6%	407	1.1%	36,473
Wright County	17,647	95.7%	111	0.6%	270	1.5%	34	0.2%	136	0.7%	245	1.3%	18,443
Region Total	1,011,539	91.4%	19,807	1.8%	37,819	3.4%	10,291	0.9%	9,769	0.9%	18,010	1.6%	1,107,235

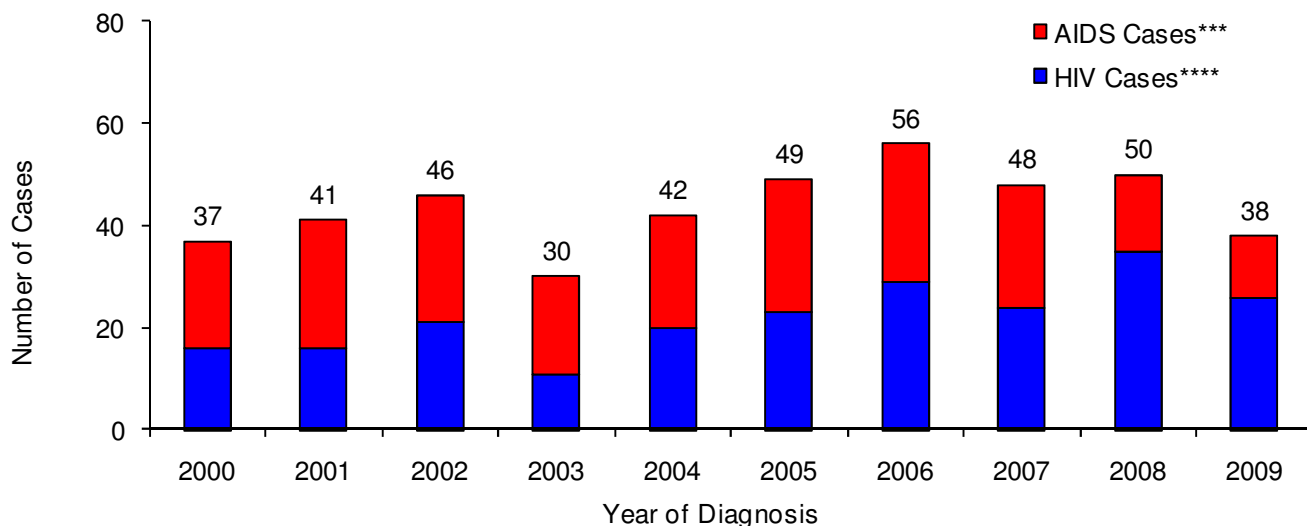
Figure 1. HIV disease cases (living and deceased), by current HIV vs. AIDS status, Southwest HIV Region, 1982—2009**Figure 2. Living and new HIV disease cases and deaths by year*, Southwest HIV Region, 2000—2009**

*For living HIV disease cases-the number of individuals living with HIV disease at the end of the year; For new HIV disease cases-the number of individuals newly diagnosed in the year, For HIV disease deaths-the number of individuals that died in the year.

From 1982 to 2009, there have been a total of 1,309 HIV disease cases diagnosed in the Southwest HIV region and reported to MDHSS (Figure 1). Of the cumulative cases reported, 63% were still presumed to be living with HIV disease at the end of 2009. Among those living with HIV disease, 394 were classified as HIV cases at the end of 2009 and 426 were classified as AIDS cases.

At the end of 2009, there were 820 persons living with HIV disease whose most recent diagnosis occurred in the Southwest HIV region (Figure 2). The number of people living with HIV disease increased over time. There were 38 new HIV disease diagnoses in 2009. The number of deaths among persons with HIV disease remained generally stable.

Figure 3. HIV disease cases, by current status* and year of diagnosis, Southwest HIV Region, 2000—2009**



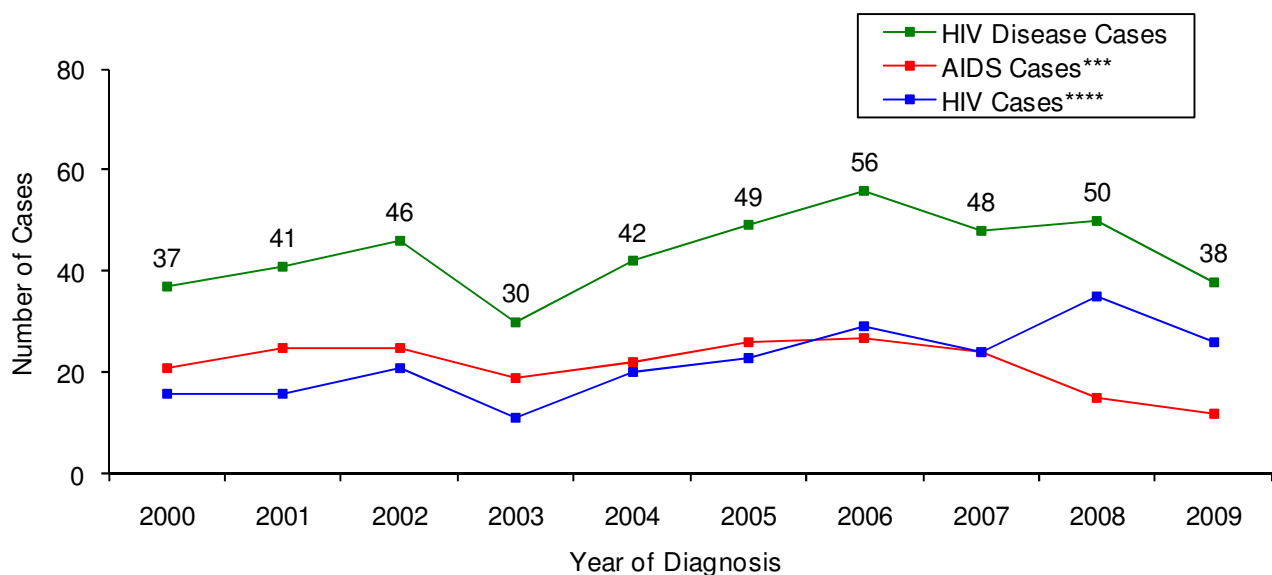
*HIV case vs. AIDS case

**Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2009.

Figure 4. Reported HIV disease cases, by current status* and year of diagnosis, Southwest HIV Region, 2000—2009**



*HIV case vs. AIDS case

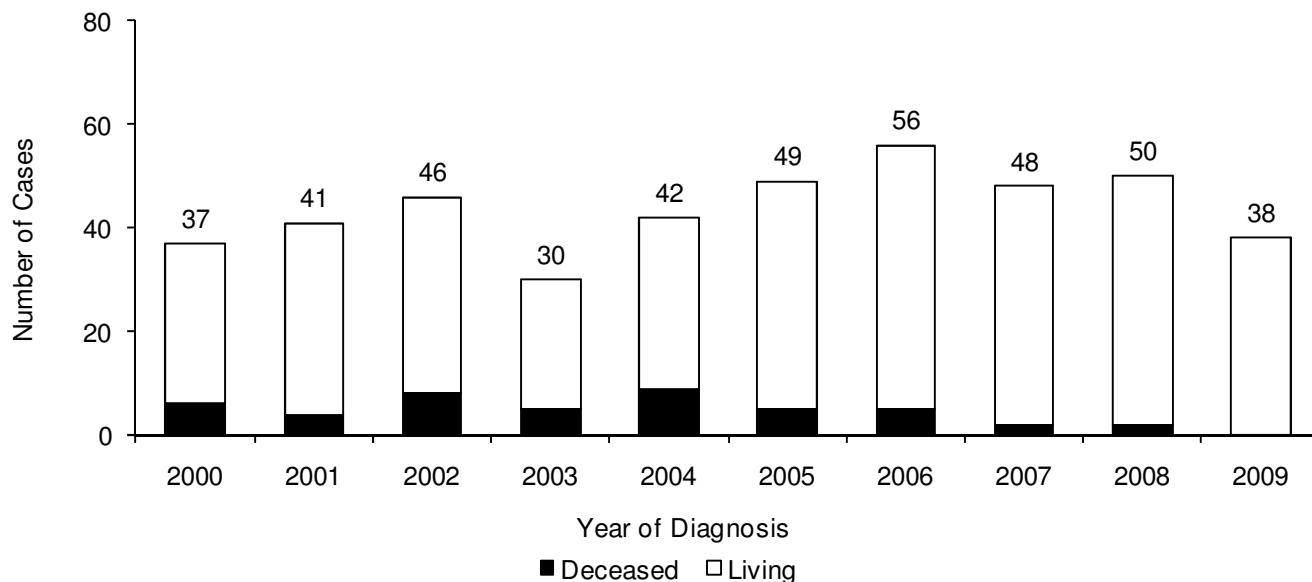
**Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2009.

The number of new diagnoses fluctuated from 2000 to 2009 in the Southwest HIV region, with an increase observed in new diagnoses from 2003 to 2006 and a general decrease in new diagnoses from 2006 to 2009 (Figures 3 and 4). Differences in the number of persons sub-classified as AIDS cases each year are due to the progression of the disease over time.

Figure 5. Persons diagnosed with HIV disease by current vital status* and year of diagnosis, Southwest HIV Region, 2000—2009**



*Vital status on December 31, 2009.

**Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

Of the 37 persons diagnosed with HIV disease in 2000, six (16%) were deceased by the end of 2009 (Figure 5). Among the 38 persons first diagnosed in 2009, none were deceased at the end of 2009. The difference in the proportion of cases that were deceased is due to the length of time individuals have been living with the disease.

Table 1. Living[†] HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and by current age, Southwest HIV Region, 2009

	HIV*			AIDS**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	298	75.6%	54.7	367	86.2%	67.4	665	81.1%	122.1
Female	96	24.4%	17.1	59	13.8%	10.5	155	18.9%	27.5
Total	394	100.0%	35.6	426	100.0%	38.5	820	100.0%	74.1
Race/Ethnicity									
White	332	84.3%	32.8	356	83.6%	35.2	688	83.9%	68.0
Black	39	9.9%	196.9	47	11.0%	237.3	86	10.5%	434.2
Hispanic	16	4.1%	42.3	18	4.2%	47.6	34	4.1%	89.9
Asian/Pacific Islander	2	0.5%	19.4	1	0.2%	9.7	3	0.4%	29.2
American Indian/Alaskan Native	0	0.0%	0.0	3	0.7%	30.7	3	0.4%	30.7
Two or More Races/Unknown	5	1.3%	--	1	0.2%	--	6	0.7%	--
Total	394	100.0%	35.6	426	100.0%	38.5	820	100.0%	74.1
Race/Ethnicity-Males									
White Male	259	86.9%	52.4	314	85.6%	63.5	573	86.2%	115.9
Black Male	24	8.1%	214.8	35	9.5%	313.3	59	8.9%	528.1
Hispanic Male	9	3.0%	44.9	14	3.8%	69.8	23	3.5%	114.6
Asian/Pacific Islander Male	2	0.7%	39.8	0	0.0%	0.0	2	0.3%	39.8
American Indian/Alaskan Native Male	0	0.0%	0.0	3	0.8%	60.9	3	0.5%	60.9
Two or More Races/Unknown Male	4	1.3%	--	1	0.3%	--	5	0.8%	--
Total	298	100.0%	54.7	367	100.0%	67.4	665	100.0%	122.1
Race/Ethnicity-Females									
White Female	73	76.0%	14.1	42	71.2%	8.1	115	74.2%	22.2
Black Female	15	15.6%	173.7	12	20.3%	139.0	27	17.4%	312.7
Hispanic Female	7	7.3%	39.4	4	6.8%	22.5	11	7.1%	62.0
Asian/Pacific Islander Female	0	0.0%	0.0	1	1.7%	19.0	1	0.6%	19.0
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	1	1.0%	--	0	0.0%	--	1	0.6%	--
Total	96	100.0%	17.1	59	100.0%	10.5	155	100.0%	27.5
Current Age[‡]									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	4	1.0%	2.5	0	0.0%	0.0	4	0.5%	2.5
13-18	7	1.8%	7.8	1	0.2%	1.1	8	1.0%	8.9
19-24	22	5.6%	23.2	6	1.4%	6.3	28	3.4%	29.5
25-44	190	48.2%	64.1	161	37.8%	54.3	351	42.8%	118.4
45-64	162	41.1%	59.9	235	55.2%	86.9	397	48.4%	146.7
65+	9	2.3%	5.5	23	5.4%	14.0	32	3.9%	19.4
Total	394	100.0%	35.6	426	100.0%	38.5	820	100.0%	74.1

[†]Includes persons diagnosed with HIV disease in the Southwest HIV Region who are currently living, regardless of current residence.

*Cases which remained HIV cases at the end of 2009.

**Cases classified as AIDS by December 31, 2009.

***The sum of HIV cases and AIDS cases.

****Per 100,000 population based on 2008 MDHSS estimates.

[‡]Based on age as of December 31, 2009.

Note: Percentages may not total due to rounding.

Table 2. Diagnosed HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and current age, Southwest HIV Region, 2009

	HIV*			AIDS**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	23	88.5%	4.2	9	75.0%	1.7	32	84.2%	5.9
Female	3	11.5%	0.5	3	25.0%	0.5	6	15.8%	1.1
Total	26	100.0%	2.3	12	100.0%	1.1	38	100.0%	3.4
Race/Ethnicity									
White	21	80.8%	2.1	9	75.0%	0.9	30	78.9%	3.0
Black	1	3.8%	5.0	0	0.0%	0.0	1	2.6%	5.0
Hispanic	2	7.7%	5.3	3	25.0%	7.9	5	13.2%	13.2
Asian/Pacific Islander	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown	2	7.7%	--	0	0.0%	--	2	5.3%	--
Total	26	100.0%	2.3	12	100.0%	1.1	38	100.0%	3.4
Race/Ethnicity-Males									
White Male	19	82.6%	3.8	7	77.8%	1.4	26	81.3%	5.3
Black Male	1	4.3%	9.0	0	0.0%	0.0	1	3.1%	9.0
Hispanic Male	1	4.3%	5.0	2	22.2%	10.0	3	9.4%	15.0
Asian/Pacific Islander Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Male	2	8.7%	--	0	0.0%	--	2	6.3%	--
Total	23	100.0%	4.2	9	100.0%	1.7	32	100.0%	5.9
Race/Ethnicity-Females									
White Female	2	66.7%	0.4	2	66.7%	0.4	4	66.7%	0.8
Black Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Hispanic Female	1	33.3%	5.6	1	33.3%	5.6	2	33.3%	11.3
Asian/Pacific Islander Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	3	100.0%	0.5	3	100.0%	0.5	6	100.0%	1.1
Current Age†									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	1	3.8%	0.6	0	0.0%	0.0	1	2.6%	0.6
13-18	1	3.8%	1.1	0	0.0%	0.0	1	2.6%	1.1
19-24	8	30.8%	8.4	0	0.0%	0.0	8	21.1%	8.4
25-44	12	46.2%	4.0	5	41.7%	1.7	17	44.7%	5.7
45-64	4	15.4%	1.5	6	50.0%	2.2	10	26.3%	3.7
65+	0	0.0%	0.0	1	8.3%	0.6	1	2.6%	0.6
Total	26	100.0%	2.3	12	100.0%	1.1	38	100.0%	3.4

*HIV cases diagnosed during 2009 which remained HIV cases at the end of the year.

**AIDS cases initially diagnosed in 2009.

***The sum of newly diagnosed HIV cases and newly diagnosed AIDS cases. Does not include cases diagnosed prior to 2009 with HIV, which progressed to AIDS in 2009.

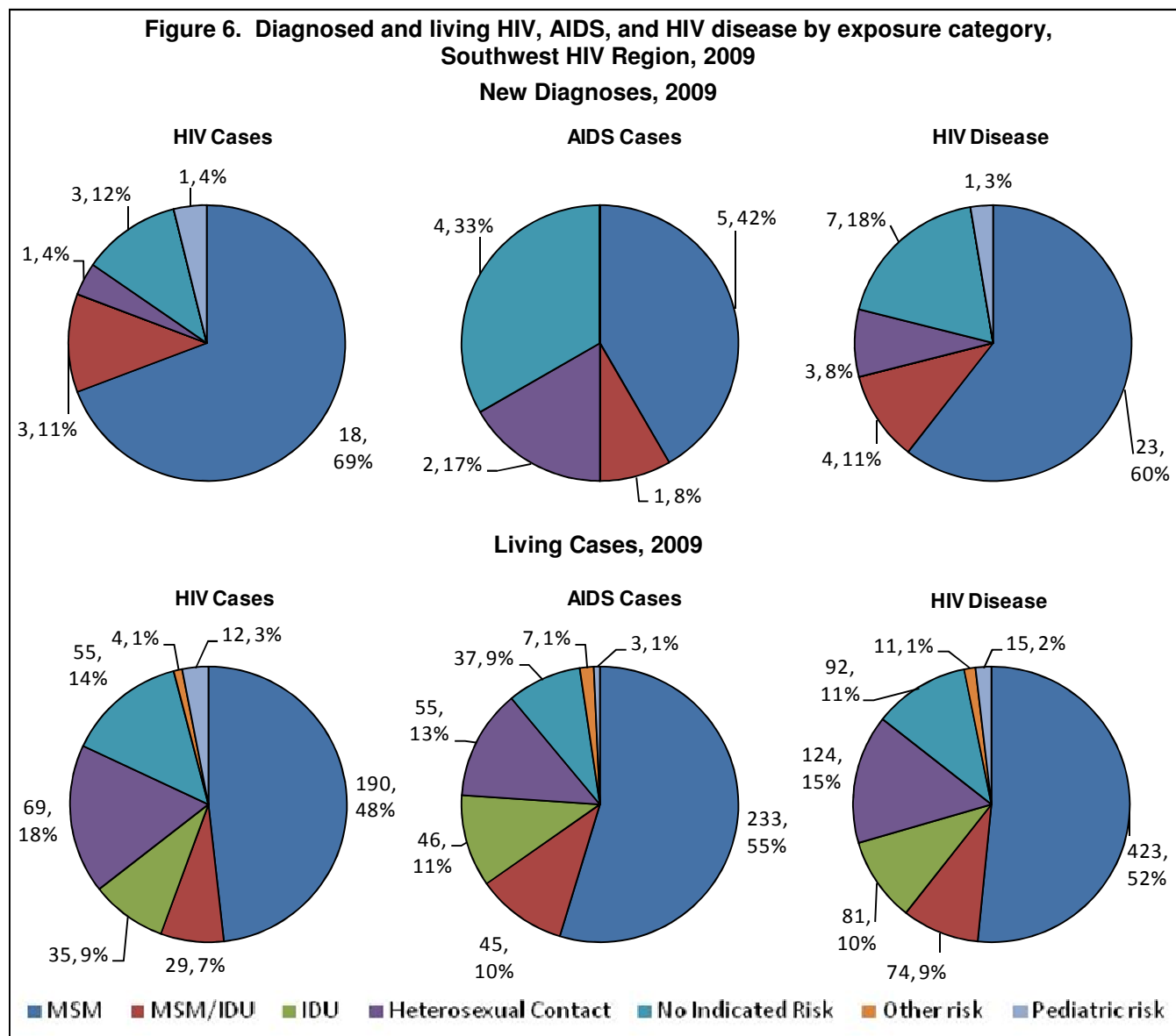
****Per 100,000 population based on 2008 MDHSS estimates.

†Based on age as of December 31, 2009.

Note: Percentages may not total due to rounding.

Of the 820 persons living with HIV at the end of 2009, 81% were males (Table 1). The rate of those living with HIV disease was 4.4 times greater among males than females. Although whites represented the largest proportion of persons living with HIV disease (84%), the rate of those living with HIV disease was 6.4 times greater among blacks than whites. The rate was 1.3 times greater among Hispanics than whites. Among males, the rate of persons living with HIV disease was 4.6 times greater for blacks than whites, but the rate was lower for Hispanics compared to whites. Among females, the rate of those living with HIV disease was 14.1 times greater among blacks than whites, and 2.8 times greater for Hispanics than whites. The difference in the rates between Hispanic and white females should be interpreted with some caution due to the small number of Hispanic females living with HIV disease.

Of the 38 persons newly diagnosed with HIV disease in 2009, 32% were classified as AIDS cases by the end of 2009 (Table 2). Whites represented the majority of new HIV disease diagnoses (79%).



Among all categories, the largest proportion of cases was attributed to MSM (Figure 6). The large proportion of cases with no indicated risk made trends difficult to interpret for all categories. The surveillance program examined methods to improve the identification and reporting of exposure category information.

Table 3. New and living HIV and AIDS cases and rates, by geographic area, Southwest HIV Region, 2009												
Geographic Area	HIV cases						AIDS cases					
	Diagnosed 2009*			Living			Diagnosed 2009**			Living		
	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***
Greene County	14	53.8%	5.2	176	44.7%	65.9	4	33.3%	1.5	180	42.3%	67.4
Jasper County	6	23.1%	5.1	51	12.9%	43.7	2	16.7%	1.7	64	15.0%	54.8
Pulaski County	0	0.0%	0.0	14	3.6%	31.4	0	0.0%	0.0	15	3.5%	33.7
Christian County	0	0.0%	0.0	22	5.6%	29.1	0	0.0%	0.0	12	2.8%	15.9
Taney County	1	3.8%	2.1	20	5.1%	42.5	2	16.7%	4.3	17	4.0%	36.2
Remainder of Region	5	19.2%	0.9	111	28.2%	19.9	4	33.3%	0.7	138	32.4%	24.8
SOUTHWEST HIV REGION TOTAL	26	100.0%	2.3	394	100.0%	35.6	12	100.0%	1.1	426	100.0%	38.5
*HIV cases diagnosed and reported to the Department during 2009 which remained HIV cases at the end of the year. **Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009. ***Per 100,000 population based on 2008 MDHSS estimates. Note: Percentages may not total due to rounding.												

The largest numbers of new HIV cases (14) and new AIDS cases (4) were diagnosed in Greene County (Table 3). The highest rates of persons living with HIV and AIDS were observed among persons diagnosed in Greene County.

Table 4. Newly diagnosed and living HIV and AIDS cases in men who have sex with men, by selected race/ethnicity, Southwest HIV Region, 2009

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	16	88.9%	168	88.4%	4	80.0%	209	89.7%
Black	0	0.0%	9	4.7%	1	20.0%	15	6.4%
Hispanic	1	5.6%	9	4.7%	0	0.0%	6	2.6%
Other/Unknown	1	5.6%	4	2.1%	0	0.0%	3	1.3%
SOUTHWEST HIV REGION TOTAL	18	100.0%	190	100.0%	5	100.0%	233	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

Note: Percentages may not total due to rounding.

Table 5. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by current age group, Southwest HIV Region, 2009

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	1	0.3%	0	0.0%	0	0.0%	1	0.2%
19-24	10	2.7%	3	12.5%	1	6.7%	16	3.8%
25-44	159	42.2%	12	50.0%	6	40.0%	180	42.6%
45-64	191	50.7%	9	37.5%	7	46.7%	208	49.2%
65+	16	4.2%	0	0.0%	1	6.7%	18	4.3%
SOUTHWEST HIV REGION TOTAL	377	100.0%	24	100.0%	15	100.0%	423	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 6. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by geographic area, Southwest HIV Region, 2009

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Greene County	191	91.0%	10	4.8%	6	2.9%	210	49.6%
Jasper County	52	89.7%	3	5.2%	1	1.7%	58	13.7%
Christian County	14	93.3%	0	0.0%	1	6.7%	15	3.5%
Remaining Counties	120	85.7%	11	7.9%	7	5.0%	140	33.1%
SOUTHWEST HIV REGION TOTAL	377	89.1%	24	5.7%	15	3.5%	423	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race in each area.

***Percentage of cases per area.

Note: Percentages may not total due to rounding.

There were 23 new HIV disease diagnoses attributed to men who have sex with men (MSM) in 2009 for the Southwest HIV region (Table 4). Seventy-eight percent of new diagnoses remained sub-classified as HIV cases at the end of 2009. Whites represented the greatest proportion of new HIV and AIDS case diagnoses. There were 423 living HIV disease cases attributed to MSM in the Southwest HIV region. Whites represented a slightly greater proportion among living AIDS cases compared to their proportion among living HIV cases.

The greatest proportion of living cases attributed to MSM was between 45-64 years old (49%) at the end of 2009 (Table 5). A greater proportion of blacks (50%) were between 25-44 years old compared to the proportion of whites (42%).

Greene County residents accounted for the largest number of MSM living with HIV in the Southwest HIV region (Table 6). The distributions of living cases by race/ethnicity among the geographic areas were similar.

Table 7. Newly diagnosed and living HIV and AIDS cases in men who have sex with men and inject drugs, by selected race/ethnicity, Southwest HIV Region, 2009

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	3	100.0%	29	100.0%	1	100.0%	38	84.4%
Black	0	0.0%	0	0.0%	0	0.0%	5	11.1%
Hispanic	0	0.0%	0	0.0%	0	0.0%	2	4.4%
Other/Unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%
SOUTHWEST HIV REGION TOTAL	3	100.0%	29	100.0%	1	100.0%	45	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

Note: Percentages may not total due to rounding.

Table 8. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity, by current age group, Southwest HIV Region, 2009

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	1	1.5%	0	0.0%	0	0.0%	1	1.4%
25-44	25	37.3%	4	80.0%	2	100.0%	31	41.9%
45-64	40	59.7%	1	20.0%	0	0.0%	41	55.4%
65+	1	1.5%	0	0.0%	0	0.0%	1	1.4%
SOUTHWEST HIV REGION TOTAL	67	100.0%	5	100.0%	2	100.0%	74	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 9. Living HIV disease cases in men who have sex with men and inject drugs, by geographic area, Southwest HIV Region, 2009

Geographic Area	Cases	%
Greene County	36	48.6%
Jasper County	11	14.9%
Taney County	5	6.8%
Remaining Counties	22	29.7%
SOUTHWEST HIV REGION TOTAL	74	100.0%

There was a total of four new HIV disease diagnoses attributed to men who have sex with men and inject drugs (MSM/IDU) in 2009 for the Southwest HIV region (Table 7). All but one of the new diagnoses remained sub-classified as HIV cases at the end of 2009. There were 74 MSM/IDU living with HIV disease at the end of 2009 whose most recent diagnosis occurred in the Southwest HIV region. Whites comprised a greater proportion of those living with HIV (100%) compared to the proportion of those living with AIDS (84%).

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM/IDU (Table 8). Among whites, more living cases were 45-64 years of age at the end of 2009. Among blacks and Hispanics the largest numbers of living cases were 25-44 years of age.

Greene County residents accounted for the largest number (36) of MSM/IDU living with HIV in the Southwest HIV region (Table 9).

Table 10. Newly diagnosed and living HIV and AIDS cases in injecting drug users, by selected race/ethnicity and sex, Southwest HIV Region, 2009

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	--	14	40.0%	0	--	26	56.5%
Black Male	0	--	1	2.9%	0	--	3	6.5%
Hispanic Male	0	--	0	0.0%	0	--	1	2.2%
White Female	0	--	18	51.4%	0	--	11	23.9%
Black Female	0	--	1	2.9%	0	--	3	6.5%
Hispanic Female	0	--	0	0.0%	0	--	2	4.3%
SOUTHWEST HIV REGION TOTAL[†]	0	--	35	100.0%	0	--	46	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

Table 11. Living HIV disease cases in injecting drug users, by selected race/ethnicity, by current age group, Southwest HIV Region, 2009

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	1	2.5%	0	0.0%	3	10.3%	0	0.0%	4	4.9%
25-44	12	30.0%	1	25.0%	12	41.4%	3	75.0%	30	37.0%
45-64	26	65.0%	3	75.0%	14	48.3%	1	25.0%	46	56.8%
65+	1	2.5%	0	0.0%	0	0.0%	0	0.0%	1	1.2%
SOUTHWEST HIV REGION TOTAL	40	100.0%	4	100.0%	29	100.0%	4	100.0%	81	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 12. Living HIV disease cases in injecting drug users, by geographic area, Southwest HIV Region, 2009

Geographic Area	Cases	%
Greene County	28	34.6%
Jasper County	10	12.3%
Remaining Counties	43	53.1%
SOUTHWEST HIV REGION TOTAL	81	100.0%

There were no new HIV disease diagnoses attributed to injecting drug users (IDU) in 2009 for the Southwest HIV region (Table 10). There were 81 living HIV disease cases attributed to IDU at the end of 2009 in the Southwest HIV region. Of the living HIV disease cases, 57% were classified as AIDS at the end of 2009. White males represented the largest proportion of living AIDS cases (57%), while white females comprised the largest proportion of living HIV cases (51%).

Overall, persons 45-64 years of age represented the largest number (46) of living HIV disease cases among IDU in the Southwest HIV region (Table 11). However there were differences in the distribution of current age by sex. A greater proportion of white and black female cases were between 25-44 years of age at the end of 2009, compared to white and black males.

Greene County had the largest number of living HIV disease cases attributed to IDU in 2009 (Table 12).

Table 13. Newly diagnosed and living HIV and AIDS cases in heterosexual contacts, by selected race/ethnicity and sex, Southwest HIV Region, 2009

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	0.0%	11	15.9%	1	50.0%	15	27.3%
Black Male	0	0.0%	6	8.7%	0	0.0%	5	9.1%
Hispanic Male	0	0.0%	0	0.0%	0	0.0%	0	0.0%
White Female	0	0.0%	40	58.0%	0	0.0%	26	47.3%
Black Female	0	0.0%	9	13.0%	0	0.0%	6	10.9%
Hispanic Female	1	100.0%	3	4.3%	1	50.0%	1	1.8%
SOUTHWEST HIV REGION TOTAL[†]	1	100.0%	69	100.0%	2	100.0%	55	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

Table 14. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and sex, by current age group, Southwest HIV Region, 2009

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.8%
25-44	6	23.1%	3	27.3%	36	54.5%	10	66.7%	59	47.6%
45-64	17	65.4%	8	72.7%	29	43.9%	5	33.3%	60	48.4%
65+	3	11.5%	0	0.0%	1	1.5%	0	0.0%	4	3.2%
SOUTHWEST HIV REGION TOTAL	26	100.0%	11	100.0%	66	100.0%	15	100.0%	124	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 15. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity, by geographic area, Southwest HIV Region, 2009

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Greene County	20	55.6%	14	38.9%	1	2.8%	36	29.0%
Jasper County	14	87.5%	1	6.3%	1	6.3%	16	12.9%
Pulaski County	1	14.3%	6	85.7%	0	0.0%	7	5.6%
Remaining Counties	57	87.7%	5	7.7%	2	3.1%	65	52.4%
SOUTHWEST HIV REGION TOTAL	92	74.2%	26	21.0%	4	3.2%	124	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race in each area.

***Percentage of cases per area.

Note: Percentages may not total due to rounding.

There were three new HIV disease diagnoses attributed to heterosexual contact in 2009 for the Southwest HIV region (Table 13). There were 124 living HIV disease cases attributed to heterosexual contact at the end of 2009 in the Southwest HIV region. White females represented the largest proportion of both living HIV (58%) and AIDS (47%) cases.

At the end of 2009, the majority of heterosexual contact cases living with HIV disease were between 25-44 years of age for white females (55%) and black females (67%) (Table 14). Among white and black males, the majority were 45-64 years of age.

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for heterosexual contact cases (Table 15). In Pulaski County and Greene County, blacks comprised a larger proportion of living cases, 86% and 39% respectively, compared to other areas.

Figure 7. Reported P&S syphilis cases, by race and sex, by age group at diagnosis, Southwest Region, 2009

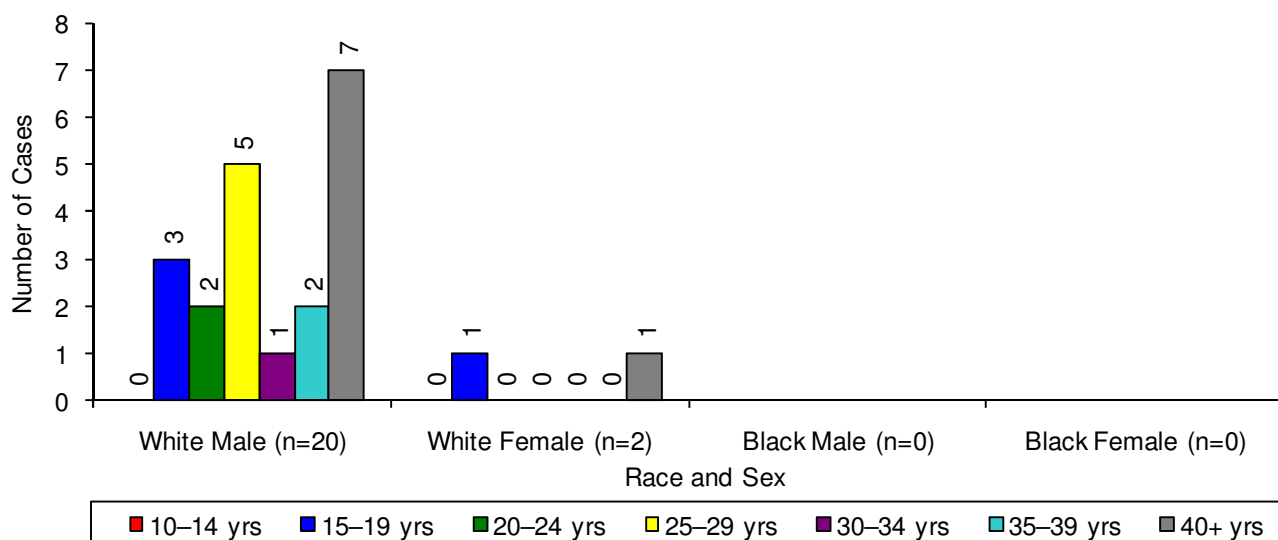
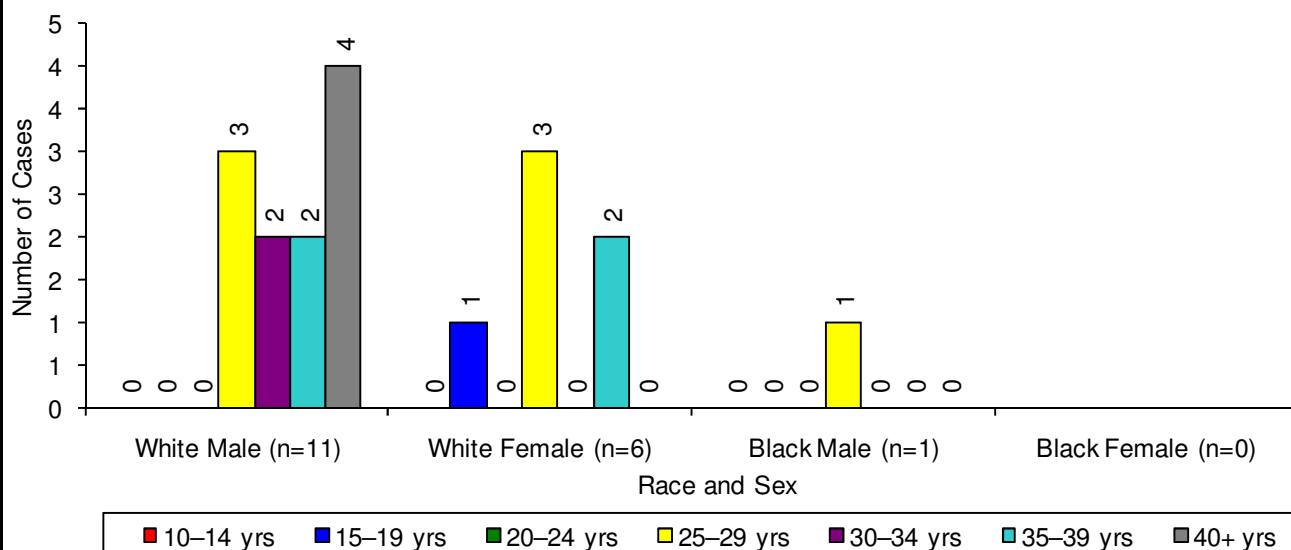
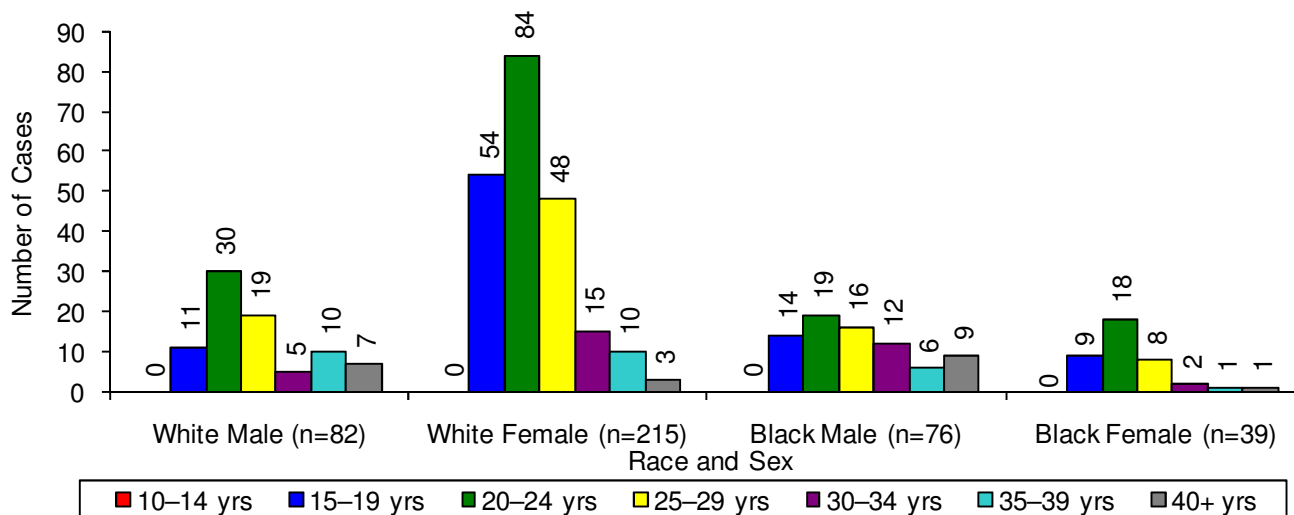


Figure 8. Reported early latent syphilis cases, by race and sex, by age group at diagnosis, Southwest Region, 2009

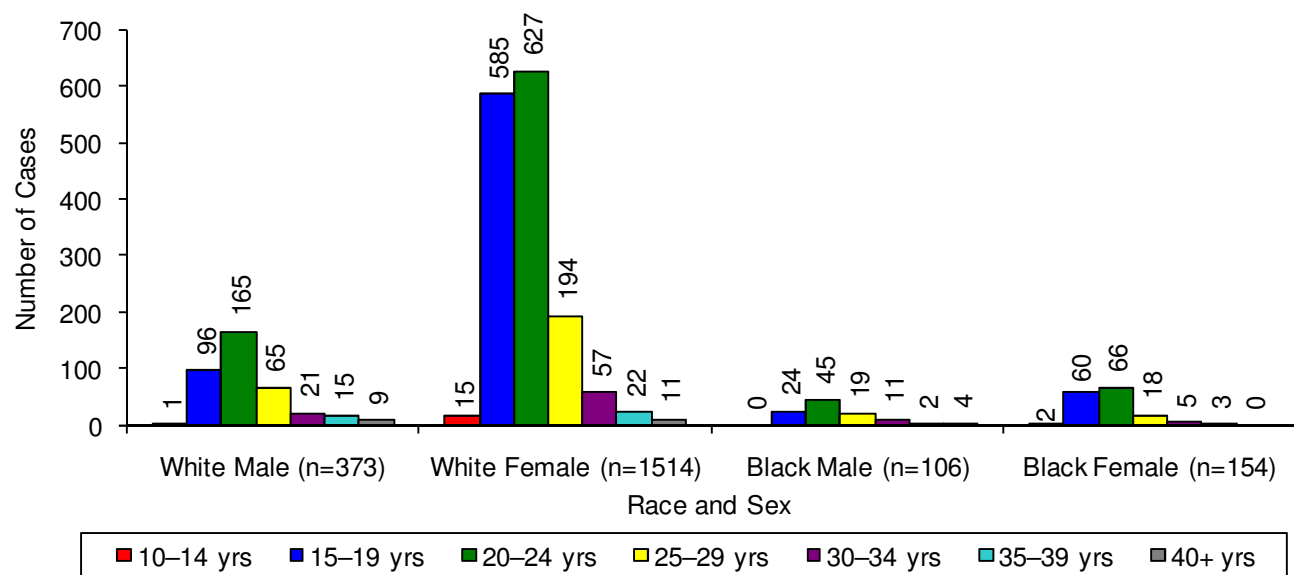


The largest number of P&S syphilis cases was reported among white males (20) (Figure 7). No cases of P&S syphilis were reported among black males or females in the Southwest HIV region in 2009. The number of reported cases increased from 2008 to 2009 among white males (16 to 20) and white females (1 to 2), and decreased among black males (2 to 0). Persons 40 years of age or more represented the largest number of white males reported with P&S syphilis.

The largest number of early latent syphilis cases was reported among white males (11) (Figure 8). No early latent syphilis cases were reported among black females. The number of reported early latent syphilis cases increased from 2008 to 2009 among white females (3 to 6), and decreased among white males (14 to 11) and black males (2 to 1). No cases were reported among black females in 2008 or 2009. Among white males, the largest number of cases were reported among individuals 40 or more years of age.

Figure 9. Reported gonorrhea cases, by race and sex, by age group at diagnosis, Southwest Region, 2009

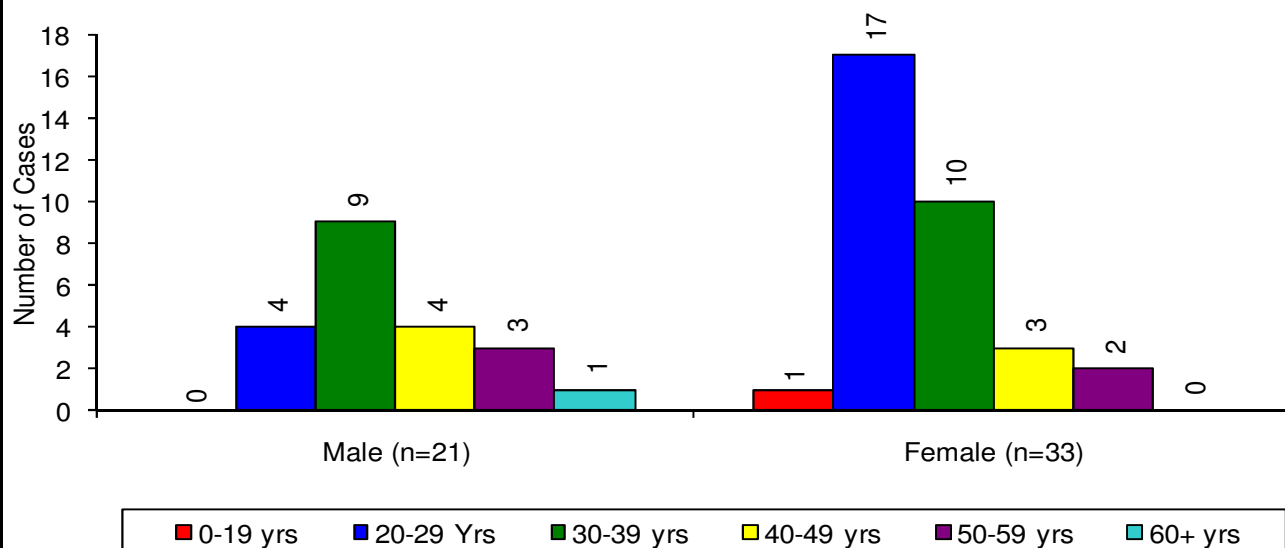
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

Figure 10. Reported chlamydia cases, by race and sex, by age group at diagnosis, Southwest Region, 2009

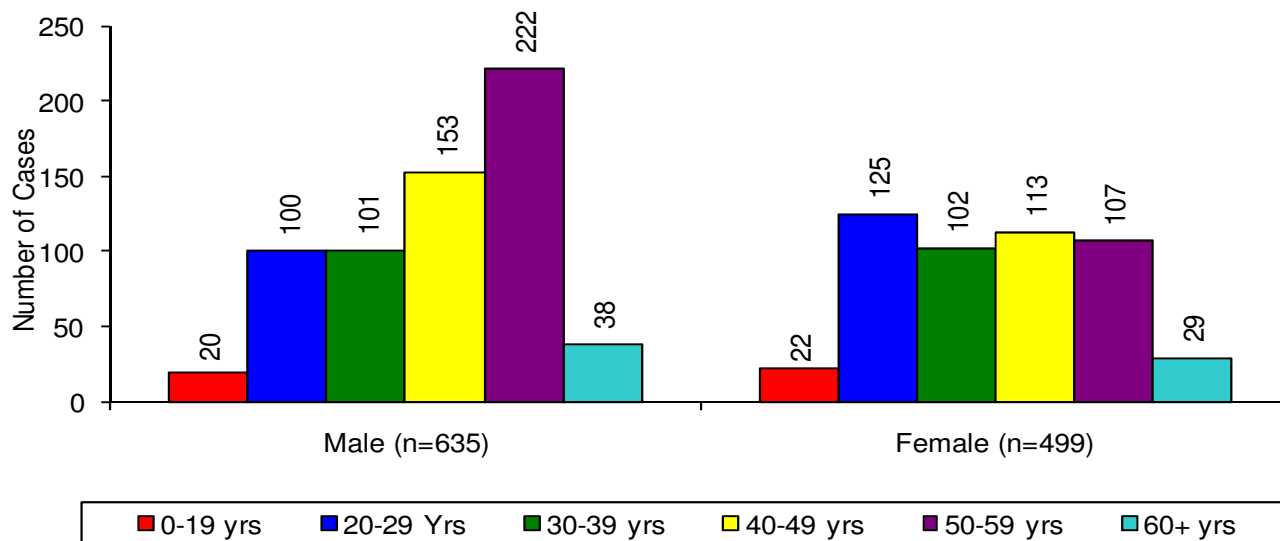
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

The largest totals of gonorrhea cases were reported among white females (215) and white males (82) in the Southwest HIV region (Figure 9). The number of reported cases increased from 2008 to 2009 among all race/ethnicity and sex categories presented, which was opposite of the trend seen in Missouri overall. Among all race/ethnicity and sex categories, the greatest numbers of cases were diagnosed between 20-24 years of age.

The largest numbers of chlamydia cases were reported among white females (1,514) and white males (373). The number of reported chlamydia cases increased from 2008 to 2009 among all race/ethnicity and sex categories presented. Individuals 20-24 years of age represented the largest number of reported cases among all race/ethnicity and sex categories presented.

Figure 11. Reported Hepatitis B cases, by sex and by age group at diagnosis, Southwest Region, 2009

Note: Totals include persons whose age at diagnosis is unknown.

Figure 12. Reported Hepatitis C cases, by sex and by age group at diagnosis, Southwest Region, 2009

Note: Totals include persons whose age at diagnosis is unknown.

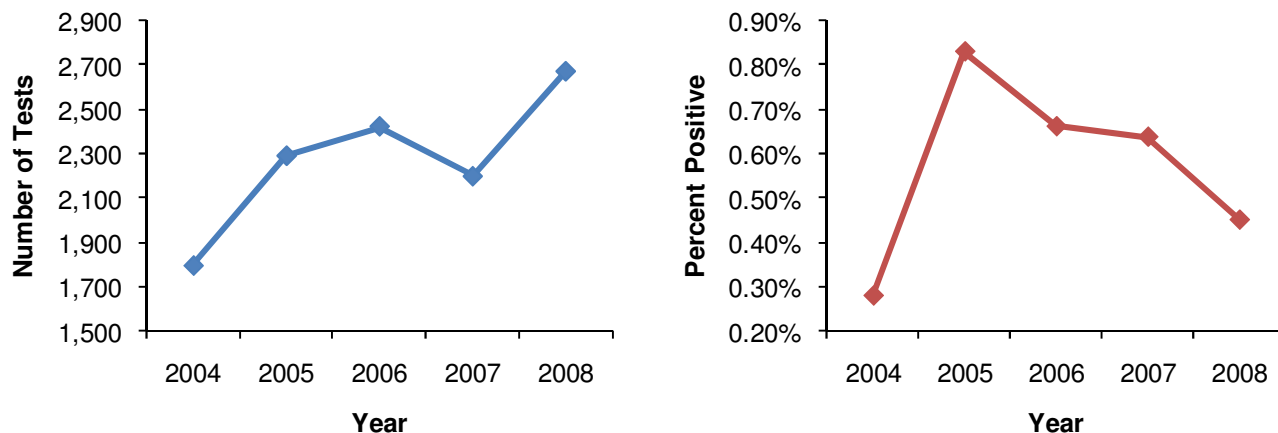
There were 54 reported cases of Hepatitis B in the Southwest HIV region during 2009 (Figure 11). Females represented 61% of reported Hepatitis B cases. There were differences in the age distribution of reported Hepatitis B cases by sex. Those 30-39 and 20-29 years of age represented the largest proportions of cases among males and females, respectively.

In 2009, there were 1,134 Hepatitis C cases reported in the Southwest HIV region (Figure 13). Of the reported Hepatitis C cases, 56% were male. There were differences in the age at diagnosis of reported Hepatitis C cases by sex. Among males, the largest numbers of cases were reported among persons 50-59 years of age. The largest number of cases among females occurred in those 20-29 years of age.

Table 16. Number of HIV tests* and positive tests among counseling, testing and referral program sites, by current gender, race/ethnicity, age, exposure category, and test method, Southwest HIV Region, 2008			
	Total Tests N	Positive Tests N %	
Total	2,668	12	0.4%
Current Gender			
Male	1,478	10	0.7%
Female	1,181	2	0.2%
Transgender	1	0	0.0%
Unknown	8	0	0.0%
Race/Ethnicity			
White	2,121	9	0.4%
Black	290	2	0.7%
Hispanic	136	1	0.7%
Other/Unknown	121	0	0.0%
Age at Test			
<13	11	0	0.0%
13-18	301	0	0.0%
19-24	901	3	0.3%
25-44	1,153	9	0.8%
45-64	276	0	0.0%
65+	21	0	0.0%
Unknown	5	0	0.0%
Exposure Category			
MSM	418	9	2.2%
MSM/IDU	12	0	0.0%
IDU	117	0	0.0%
Heterosexual Contact**	128	0	0.0%
Presumed Heterosexual Contact***	880	1	0.1%
Unknown	1,113	2	0.2%
Test Method			
Rapid	777	9	1.2%
Conventional	1,889	3	0.2%
Unknown	2	0	0.0%
*Includes only tests where a result was available and where the individual did not self-report a previously positive HIV test and reported residing in the Southwest HIV Region.			
**Includes males and females who reported no injection drug use and reported high risk heterosexual behaviors with the opposite gender; corresponds with the CDC definition of high risk heterosexual contact.			
***Includes females who reported no history of injection drug use and reported sex with males without additional risk behaviors.			
Source: Missouri Counseling and Testing data			

Table 16 presents testing characteristics only among those tests performed at MDHSS counseling and testing sites among persons residing in the Southwest HIV region where the results were available and for tests where the individual did not report a previously positive HIV test; there were 2,668 tests that met these criteria. Overall, less than one percent of tests were positive for HIV disease.

The number of tests generally increased from 2004-2008 among residents in the Southwest HIV region, with a slight decrease seen in 2007 (Figure 13). The percent of tests that were positive increased from 2004-2005 and then decreased from 2005-2008.

Figure 13. Number of HIV tests and percent positive results at Missouri counseling and testing sites, Southwest HIV Region, 2004-2008

Source: Missouri Counseling and Testing data

There were variations in the distributions of case management enrollment, ADAP enrollment, and persons living with HIV disease by current age (Table 17). Persons 25-44 years of age tended to represent a greater proportion of persons enrolled in case management and ADAP compared to all persons living with HIV disease in the region. Differences in demographic information may exist because data regarding persons living with HIV disease were obtained from a different source (eHARS) than information on persons enrolled in case management or ADAP (FACTORS).

Table 17. Demographic characteristics of persons enrolled in HIV medical case management, persons enrolled in ADAP, and persons living with HIV disease, Southwest HIV Region, 2009

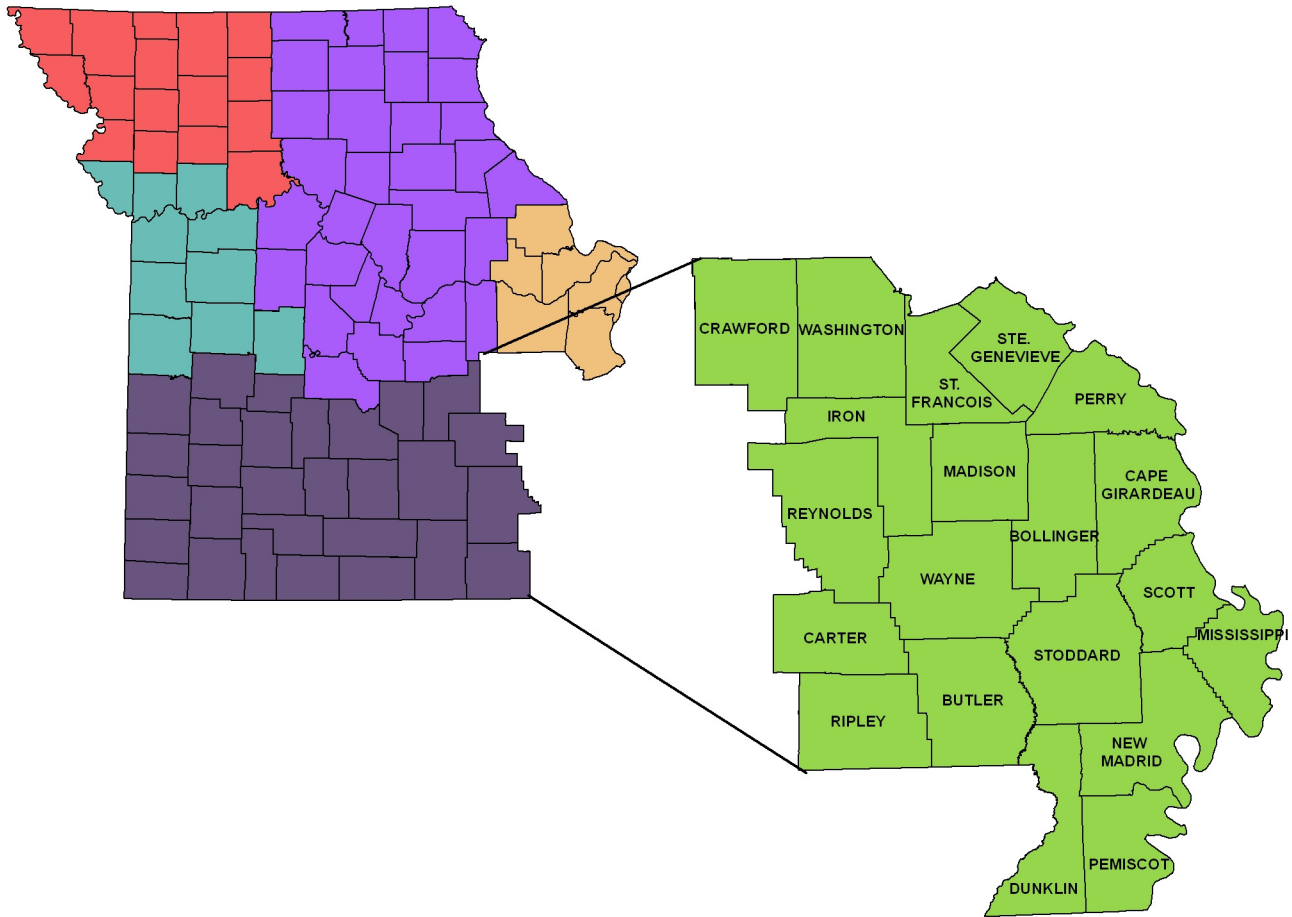
	<u>Enrolled in Case Management</u>		<u>Enrolled in ADAP*</u>		<u>Living HIV Disease</u>	
	N	%	N	%	N	%
Current Gender						
Male	525	79.4%	259	77.3%	665	81.1%
Female	133	20.1%	74	22.1%	153	18.7%
Transgender	3	0.5%	2	0.6%	2	0.2%
Unknown	0	0.0%	0	0.0%	0	0.0%
Total	661	100.0%	335	100.0%	820	100.0%
Race/Ethnicity						
White	549	83.1%	266	79.4%	688	83.9%
Black	64	9.7%	35	10.4%	86	10.5%
Hispanic	37	5.6%	28	8.4%	34	4.1%
Asian/Pacific Islander	2	0.3%	2	0.6%	3	0.4%
American Indian/Alaskan Native	8	1.2%	4	1.2%	3	0.4%
Two or More Races/Unknown	1	0.2%	0	0.0%	6	0.7%
Total	661	100.0%	335	100.0%	820	100.0%
Current Age[‡]						
<13	3	0.5%	3	0.9%	4	0.5%
13-18	7	1.1%	1	0.3%	8	1.0%
19-24	25	3.8%	16	4.8%	28	3.4%
25-44	298	45.1%	184	54.9%	351	42.8%
45-64	307	46.4%	126	37.6%	397	48.4%
65+	19	2.9%	4	1.2%	32	3.9%
Unknown	2	0.3%	1	0.3%	0	0.0%
Total	661	100.0%	335	100.0%	820	100.0%

*ADAP=AIDS Drug Assistance Program

‡As of December 31, 2009

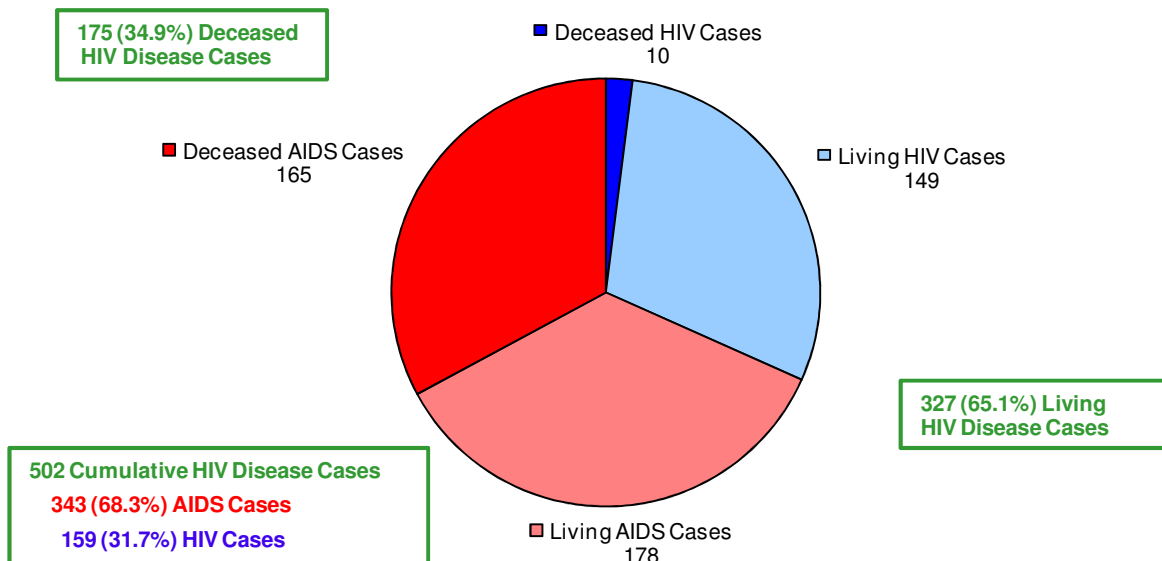
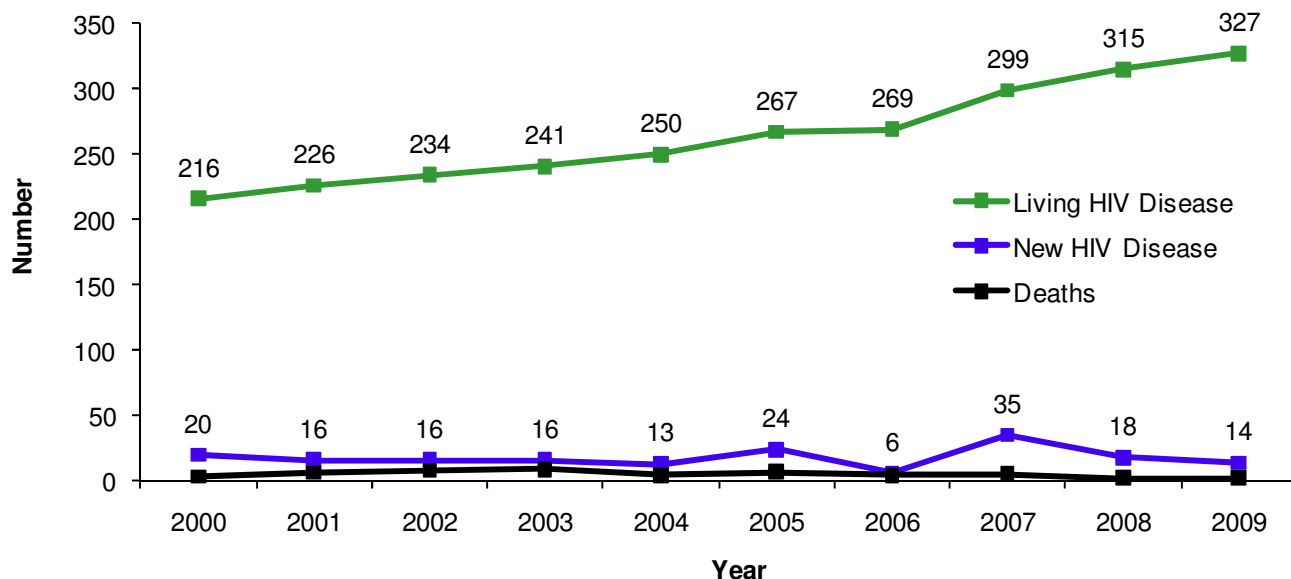
Source: FACTORS and eHARS

SOUTHEAST REGION



Population Estimates, Southeast HIV Region, 2008

County	White		Black		Hispanic		Asian/Pacific Islander		American Indian/Alaskan Native		Two or More Races		Total
Bollinger County	11,612	96.8%	40	0.3%	94	0.8%	28	0.2%	90	0.8%	126	1.1%	11,990
Butler County	37,442	90.5%	2,201	5.3%	615	1.5%	318	0.8%	232	0.6%	575	1.4%	41,383
Cape Girardeau County	65,922	90.0%	4,336	5.9%	1,029	1.4%	762	1.0%	268	0.4%	926	1.3%	73,243
Carter County	5,591	94.9%	5	0.1%	86	1.5%	9	0.2%	85	1.4%	114	1.9%	5,890
Crawford County	23,065	96.2%	127	0.5%	374	1.6%	44	0.2%	115	0.5%	245	1.0%	23,970
Dunklin County	26,584	84.5%	2,892	9.2%	1,392	4.4%	99	0.3%	105	0.3%	382	1.2%	31,454
Iron County	9,412	94.9%	221	2.2%	92	0.9%	12	0.1%	39	0.4%	142	1.4%	9,918
Madison County	11,892	96.9%	53	0.4%	139	1.1%	43	0.4%	33	0.3%	116	0.9%	12,276
Mississippi County	10,326	76.5%	2,743	20.3%	202	1.5%	70	0.5%	39	0.3%	124	0.9%	13,504
New Madrid County	14,530	82.6%	2,588	14.7%	224	1.3%	29	0.2%	34	0.2%	184	1.0%	17,589
Pemiscot County	13,259	71.6%	4,556	24.6%	418	2.3%	65	0.4%	52	0.3%	165	0.9%	18,515
Perry County	18,079	96.5%	95	0.5%	261	1.4%	145	0.8%	45	0.2%	118	0.6%	18,743
Reynolds County	6,045	94.6%	37	0.6%	59	0.9%	13	0.2%	89	1.4%	145	2.3%	6,388
Ripley County	12,853	95.3%	50	0.4%	182	1.3%	45	0.3%	185	1.4%	170	1.3%	13,485
Scott County	34,723	85.4%	4,606	11.3%	657	1.6%	145	0.4%	128	0.3%	414	1.0%	40,673
St. Francois County	59,021	93.4%	2,195	3.5%	755	1.2%	321	0.5%	252	0.4%	670	1.1%	63,214
Ste. Genevieve County	17,081	96.4%	220	1.2%	191	1.1%	37	0.2%	50	0.3%	141	0.8%	17,720
Stoddard County	28,321	95.9%	407	1.4%	317	1.1%	74	0.3%	122	0.4%	296	1.0%	29,537
Washington County	23,125	94.2%	649	2.6%	269	1.1%	44	0.2%	155	0.6%	306	1.2%	24,548
Wayne County	12,151	96.0%	83	0.7%	123	1.0%	26	0.2%	78	0.6%	191	1.5%	12,652
Region Total	441,034	90.6%	28,104	5.8%	7,479	1.5%	2,329	0.5%	2,196	0.5%	5,550	1.1%	486,692

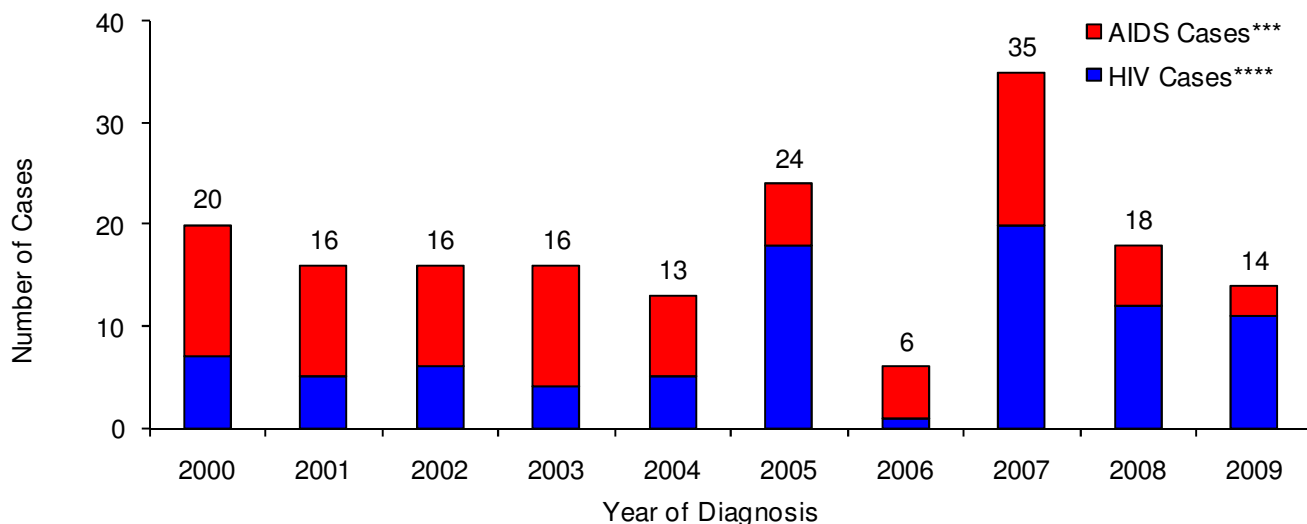
Figure 1. HIV disease cases (living and deceased), by current HIV vs. AIDS status, Southeast HIV Region, 1982—2009**Figure 2. Living and new HIV disease cases and deaths by year*, Southeast HIV Region, 2000—2009**

*For living HIV disease cases-the number of individuals living with HIV disease at the end of the year; For new HIV disease cases-the number of individuals newly diagnosed in the year, For HIV disease deaths-the number of individuals that died in the year.

From 1982 to 2009, there have been a total of 502 HIV disease cases diagnosed in the Southeast HIV region and reported to MDHSS (Figure 1). Of the cumulative cases reported, 65% were still presumed to be living with HIV disease at the end of 2009. Among those living with HIV disease, 149 were classified as HIV cases at the end of 2009 and 178 were classified as AIDS cases.

At the end of 2009, there were 327 persons living with HIV disease whose most recent diagnosis occurred in the Southeast HIV region (Figure 2). The number of people living with HIV disease increased over time. There were 14 new HIV disease diagnoses in 2009. The number of new diagnoses has fluctuated from 2005 to 2009. A new testing initiative implemented in 2007 may be one reason for the greater number of HIV disease diagnoses in 2007. The number of deaths among persons with HIV disease has remained generally stable.

Figure 3. HIV disease cases, by current status* and year of diagnosis, Southeast HIV Region, 2000—2009**



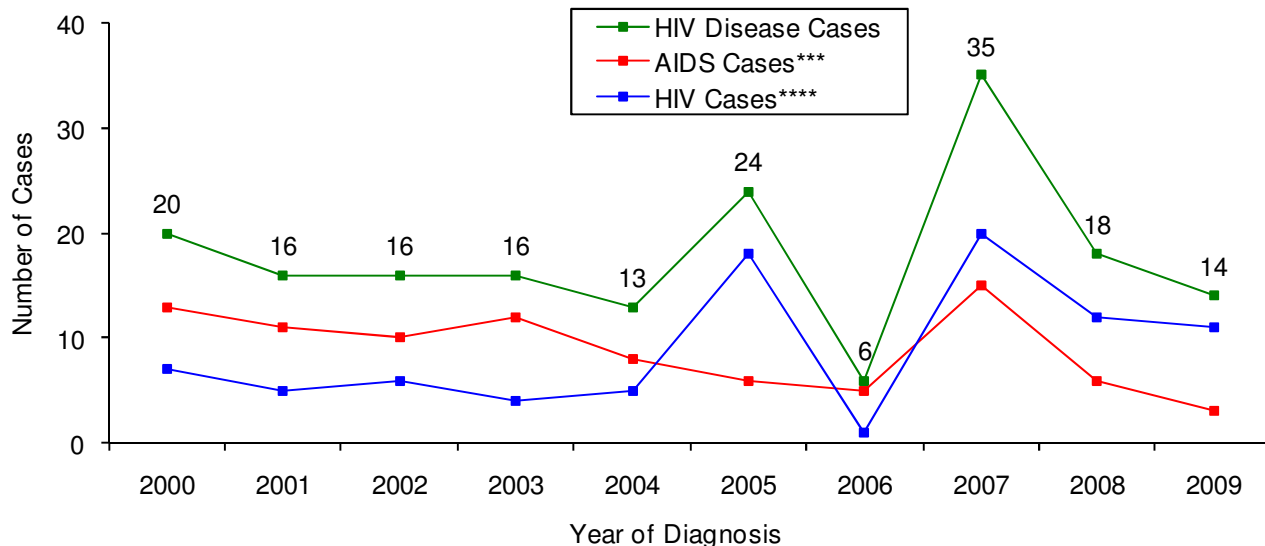
*HIV case vs. AIDS case

**Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2009.

Figure 4. Reported HIV disease cases, by current status* and year of diagnosis, Southeast HIV Region, 2000—2009**



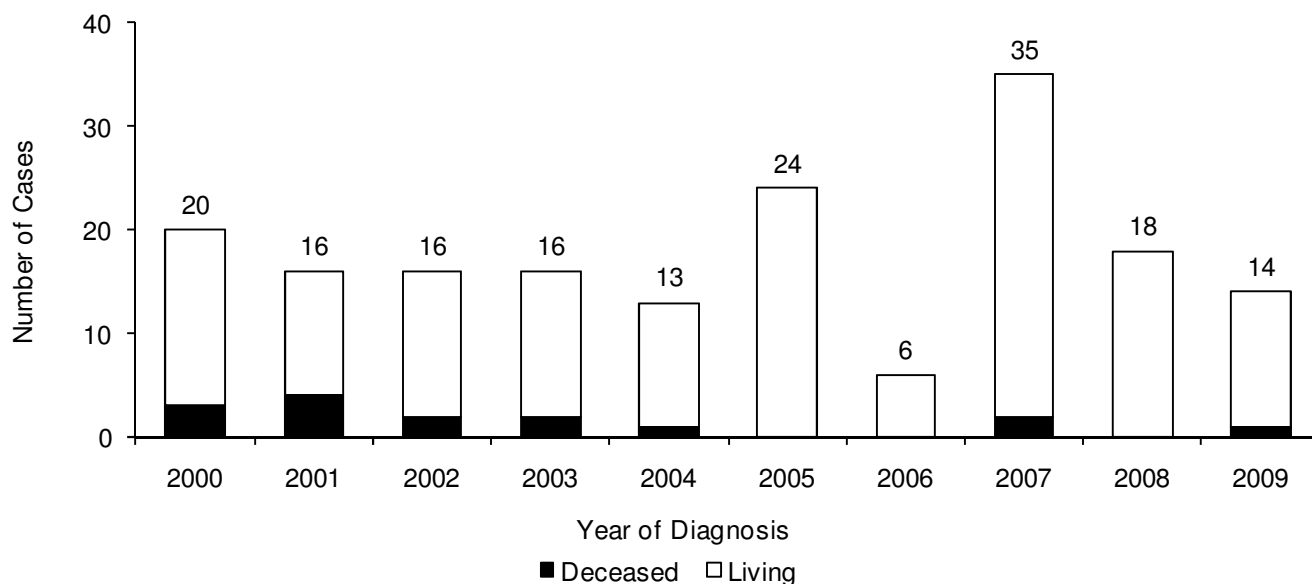
*HIV case vs. AIDS case

**Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

***These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

****These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2009.

The number of new diagnoses has fluctuated between 2005 and 2008 in the Southeast region (Figures 3 and 4). A new testing initiative implemented in 2007 may be one reason for the greater number of HIV disease diagnoses in 2007. Differences in the number of persons sub-classified as AIDS cases each year are due to the progression of the disease over time.

Figure 5. Persons diagnosed with HIV disease by current vital status* and year of diagnosis, Southeast HIV Region, 2000—2009**

*Vital status on December 31, 2009.

**Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

Of the 20 persons diagnosed with HIV disease in 1999, three (15%) were deceased by the end of 2009 (Figure 5). Among the 14 persons first diagnosed in 2009, one (7%) was deceased at the end of 2009. The difference in the proportion of cases that are deceased is due to the length of time individuals have been living with the disease. Among persons diagnosed in 2005, 2006, and 2008 no deaths have been reported to MDHSS.

Table 1. Living[†] HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and by current age, Southeast HIV Region, 2009

	HIV*			AIDS**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	110	73.8%	46.0	126	70.8%	52.7	236	72.2%	98.7
Female	39	26.2%	15.8	52	29.2%	21.0	91	27.8%	36.8
Total	149	100.0%	30.6	178	100.0%	36.6	327	100.0%	67.2
Race/Ethnicity									
White	98	65.8%	22.2	130	73.0%	29.5	228	69.7%	51.7
Black	46	30.9%	163.7	46	25.8%	163.7	92	28.1%	327.4
Hispanic	4	2.7%	53.5	1	0.6%	13.4	5	1.5%	66.9
Asian/Pacific Islander	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown	1	0.7%	--	1	0.6%	--	2	0.6%	--
Total	149	100.0%	30.6	178	100.0%	36.6	327	100.0%	67.2
Race/Ethnicity-Males									
White Male	77	70.0%	35.7	104	82.5%	48.2	181	76.7%	83.9
Black Male	29	26.4%	205.0	20	15.9%	141.4	49	20.8%	346.5
Hispanic Male	3	2.7%	73.5	1	0.8%	24.5	4	1.7%	98.1
Asian/Pacific Islander Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Male	1	0.9%	--	1	0.8%	--	2	0.8%	--
Total	110	100.0%	46.0	126	100.0%	52.7	236	100.0%	98.7
Race/Ethnicity-Females									
White Female	21	53.8%	9.3	26	50.0%	11.5	47	51.6%	20.9
Black Female	17	43.6%	121.8	26	50.0%	186.2	43	47.3%	308.0
Hispanic Female	1	2.6%	29.4	0	0.0%	0.0	1	1.1%	29.4
Asian/Pacific Islander Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	39	100.0%	15.8	52	100.0%	21.0	91	100.0%	36.8
Current Age[‡]									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	2	1.3%	2.9	0	0.0%	0.0	2	0.6%	2.9
13-18	0	0.0%	0.0	1	0.6%	2.5	1	0.3%	2.5
19-24	6	4.0%	16.8	4	2.2%	11.2	10	3.1%	28.0
25-44	82	55.0%	63.1	72	40.4%	55.4	154	47.1%	118.6
45-64	51	34.2%	41.0	95	53.4%	76.5	146	44.6%	117.5
65+	8	5.4%	10.5	6	3.4%	7.8	14	4.3%	18.3
Total	149	100.0%	30.6	178	100.0%	36.6	327	100.0%	67.2

[†]Includes persons diagnosed with HIV disease in the Southeast HIV Region who are currently living, regardless of current residence.

*Cases which remained HIV cases at the end of 2009.

**Cases classified as AIDS by December 31, 2009.

***The sum of HIV cases and AIDS cases.

****Per 100,000 population based on 2008 MDHSS estimates.

[‡]Based on age as of December 31, 2009.

Note: Percentages may not total due to rounding.

Table 2. Diagnosed HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and current age, Southeast HIV Region, 2009

	HIV*			AIDS**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
Sex									
Male	7	63.6%	2.9	2	66.7%	0.8	9	64.3%	3.8
Female	4	36.4%	1.6	1	33.3%	0.4	5	35.7%	2.0
Total	11	100.0%	2.3	3	100.0%	0.6	14	100.0%	2.9
Race/Ethnicity									
White	7	63.6%	1.6	1	33.3%	0.2	8	57.1%	1.8
Black	4	36.4%	14.2	2	66.7%	7.1	6	42.9%	21.3
Hispanic	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Asian/Pacific Islander	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	11	100.0%	2.3	3	100.0%	0.6	14	100.0%	2.9
Race/Ethnicity-Males									
White Male	6	85.7%	2.8	1	50.0%	0.5	7	77.8%	3.2
Black Male	1	14.3%	7.1	1	50.0%	7.1	2	22.2%	14.1
Hispanic Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Asian/Pacific Islander Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Male	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	7	100.0%	2.9	2	100.0%	0.8	9	100.0%	3.8
Race/Ethnicity-Females									
White Female	1	25.0%	0.4	0	0.0%	0.0	1	20.0%	0.4
Black Female	3	75.0%	21.5	1	100.0%	7.2	4	80.0%	28.7
Hispanic Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Asian/Pacific Islander Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian/Alaskan Native Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Two or More Races/Unknown Female	0	0.0%	--	0	0.0%	--	0	0.0%	--
Total	4	100.0%	1.6	1	100.0%	0.4	5	100.0%	2.0
Current Age†									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
13-18	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
19-24	1	9.1%	2.8	0	0.0%	0.0	1	7.1%	2.8
25-44	8	72.7%	6.2	0	0.0%	0.0	8	57.1%	6.2
45-64	2	18.2%	1.6	2	66.7%	1.6	4	28.6%	3.2
65+	0	0.0%	0.0	1	33.3%	1.3	1	7.1%	1.3
Total	11	100.0%	2.3	3	100.0%	0.6	14	100.0%	2.9

*HIV cases diagnosed during 2009 which remained HIV cases at the end of the year.

**AIDS cases initially diagnosed in 2009.

***The sum of newly diagnosed HIV cases and newly diagnosed AIDS cases. Does not include cases diagnosed prior to 2009 with HIV, which progressed to AIDS in 2009.

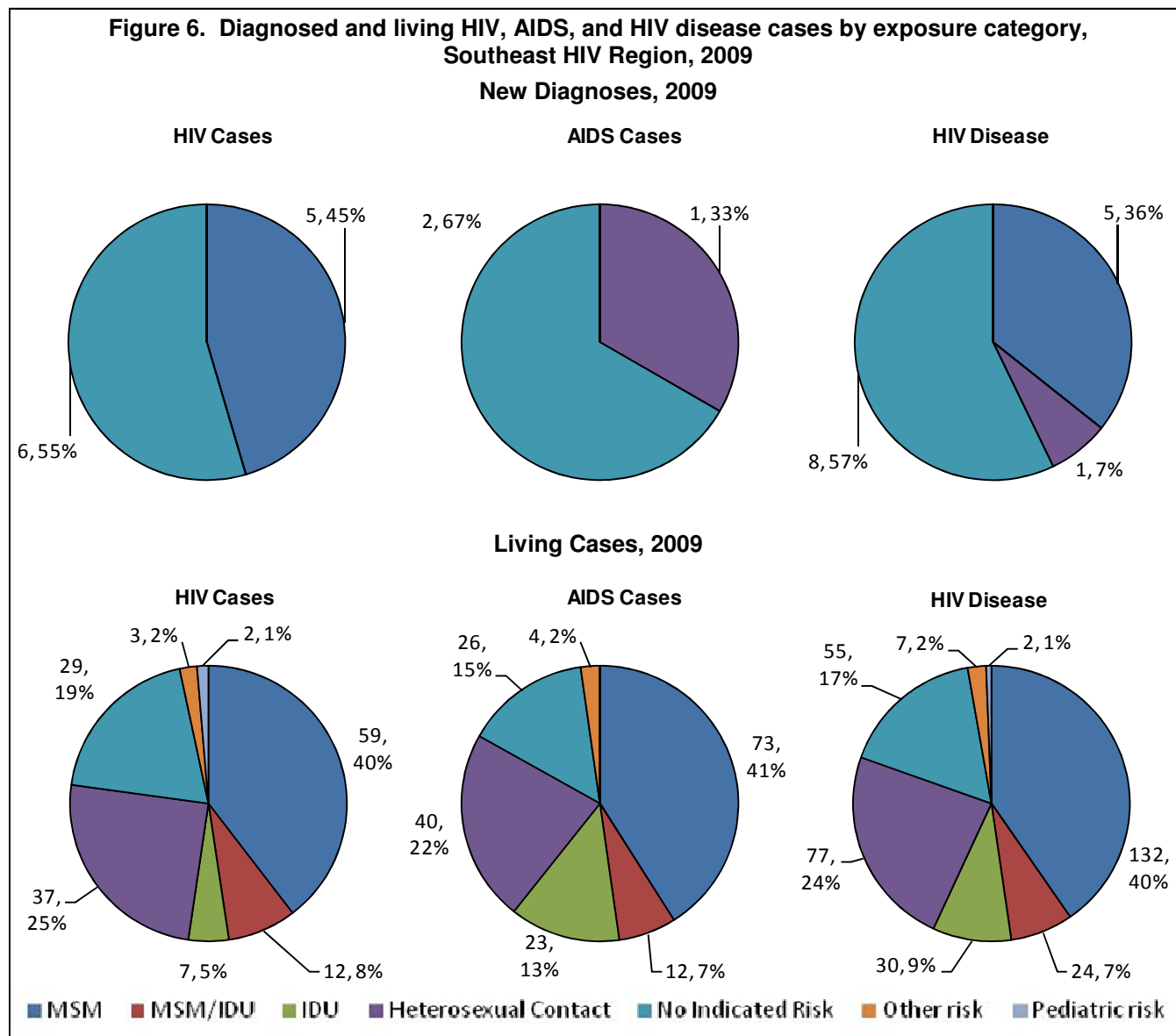
****Per 100,000 population based on 2008 MDHSS estimates.

†Based on age as of December 31, 2009.

Note: Percentages may not total due to rounding.

Of the 327 persons living with HIV at the end of 2009, 72% were males (Table 1). The rate of those living with HIV disease was 2.7 times greater among males than females. The difference in the rates between males and females was smaller than that observed in Missouri overall. Although whites represented the largest proportion of living HIV disease cases (70%), the rate of those living with HIV disease was 6.3 times greater among blacks than whites. The rate was 1.3 times greater among Hispanics than whites. However, the difference should be interpreted with caution because of the small number of Hispanics living with HIV disease. Among males, the rate of living cases was 4.1 times greater for blacks than whites. Among females, the rate of those living with HIV disease was 14.7 times greater among blacks than whites.

Of the 14 persons newly diagnosed with HIV disease in 2009, 21% were classified as AIDS cases by the end of 2009 (Table 2). Males represented 64% of new diagnoses. Whites represented the majority of new HIV disease diagnoses (57%).



Among all categories, except new AIDS cases, the largest proportion of cases with a known risk were attributed to MSM (Figure 6). The large proportion of cases with no indicated risk made trends difficult to interpret for all categories. The surveillance program examined methods to improve the identification and reporting of exposure category information.

Table 3. New and living HIV and AIDS cases and rates, by geographic area, Southeast HIV Region, 2009

Geographic Area	HIV Cases						AIDS Cases					
	Diagnosed 2009*			Living			Diagnosed 2009**			Living		
	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***
Cape Girardeau County	0	0.0%	0.0	25	16.8%	34.1	0	0.0%	0.0	25	14.0%	34.1
Scott County	0	0.0%	0.0	17	11.4%	41.8	0	0.0%	0.0	10	5.6%	24.6
St. Francois County	1	9.1%	1.6	18	12.1%	28.5	0	0.0%	0.0	30	16.9%	47.5
Pemiscot County	3	27.3%	16.2	18	12.1%	97.2	1	33.3%	5.4	7	3.9%	37.8
Dunklin County	1	9.1%	3.2	9	6.0%	28.6	1	33.3%	3.2	22	12.4%	69.9
Butler County	1	9.1%	2.4	12	8.1%	29.0	0	0.0%	0.0	15	8.4%	36.2
Remainder of Region	5	45.5%	2.3	50	33.6%	22.9	1	33.3%	0.5	69	38.8%	31.6
SOUTHEAST HIV REGION TOTAL	11	100.0%	2.3	149	100.0%	30.6	3	100.0%	0.6	178	100.0%	36.6

*HIV cases diagnosed and reported to the Department during 2009 which remained HIV cases at the end of the year.

**Does not include HIV cases that progressed to AIDS.

***Per 100,000 population based on 2008 MDHSS estimates.

Note: Percentages may not total due to rounding.

Although the number of living HIV cases was greatest in Cape Girardeau County, the rate of individuals living with HIV was greatest in Pemiscot County (Table 3). Among living AIDS cases, the largest numbers were residents of St. Francois County at the time of their AIDS diagnosis. However, the rate of individuals living with AIDS was highest in Dunklin County.

Table 4. Newly diagnosed and living HIV and AIDS cases in men who have sex with men, by selected race/ethnicity, Southeast HIV Region, 2009

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	5	100.0%	47	79.7%	0	--	64	87.7%
Black	0	0.0%	10	16.9%	0	--	7	9.6%
Hispanic	0	0.0%	2	3.4%	0	--	1	1.4%
Other/Unknown	0	0.0%	0	0.0%	0	--	1	1.4%
SOUTHEAST HIV REGION TOTAL	5	100.0%	59	100.0%	0	--	73	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

Note: Percentages may not total due to rounding.

Table 5. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by current age group, Southeast HIV Region, 2009

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	1	0.9%	1	5.9%	1	33.3%	3	2.3%
25-44	61	55.0%	11	64.7%	2	66.7%	74	56.1%
45-64	48	43.2%	5	29.4%	0	0.0%	54	40.9%
65+	1	0.9%	0	0.0%	0	0.0%	1	0.8%
SOUTHEAST HIV REGION TOTAL	111	100.0%	17	100.0%	3	100.0%	132	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 6. Living HIV disease cases in men who have sex with men, by geographic area, Southeast HIV Region, 2009

Geographic Area	Cases	%
Cape Girardeau County	31	23.5%
Scott County	9	6.8%
St. Francois County	24	18.2%
Pemiscot County	7	5.3%
Dunklin County	8	6.1%
Butler County	12	9.1%
Remaining Counties	41	31.1%
SOUTHEAST HIV REGION TOTAL	132	100.0%

There were five new HIV disease diagnoses attributed to men who have sex with men (MSM) in 2009 for the Southeast HIV region (Table 4). All new diagnoses remained sub-classified as HIV cases at the end of 2009. Whites represented all of the new HIV diagnoses. There were 132 living HIV disease cases attributed to MSM in the Southeast HIV region. Whites represented a greater proportion among living AIDS cases compared to living HIV cases.

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM (Table 5). Greater proportions of black and Hispanic MSM living with HIV disease were 44 years of age or less at the end of 2009 compared to whites in the Southeast HIV region. The distribution by current age for Hispanics should be interpreted with some caution due to the small number of cases.

The largest numbers of living HIV disease cases attributed to MSM were residents of Cape Girardeau County at the time of their most recent diagnosis (Table 6). The second largest number of living cases among MSM resided in St. Francois County.

Table 7. Newly diagnosed and living HIV and AIDS cases in men who have sex with men and inject drugs, by selected race/ethnicity, Southeast HIV Region, 2009

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	0	--	12	100.0%	0	--	9	75.0%
Black	0	--	0	0.0%	0	--	3	25.0%
Hispanic	0	--	0	0.0%	0	--	0	0.0%
Other/Unknown	0	--	0	0.0%	0	--	0	0.0%
SOUTHEAST HIV REGION TOTAL	0	--	12	100.0%	0	--	12	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

Note: Percentages may not total due to rounding.

Table 8. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity, by current age group, Southeast HIV Region, 2009

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	--	0	0.0%
19-24	0	0.0%	0	0.0%	0	--	0	0.0%
25-44	9	42.9%	2	66.7%	0	--	11	45.8%
45-64	12	57.1%	1	33.3%	0	--	13	54.2%
65+	0	0.0%	0	0.0%	0	--	0	0.0%
SOUTHEAST HIV REGION TOTAL	21	100.0%	3	100.0%	0	--	24	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 9. Living HIV disease cases in men who have sex with men and inject drugs, by geographic area, Southeast HIV Region, 2009

Geographic Area	Cases	%
SOUTHEAST HIV REGION TOTAL	24	100.0%

There were no new HIV disease diagnoses attributed to men who have sex with men and inject drugs (MSM/IDU) in 2009 for the Southeast HIV region (Table 7). There were 24 MSM/IDU living with HIV disease at the end of 2009 whose most recent diagnosis occurred in the Southeast HIV region. The largest proportion of both living HIV and AIDS cases was white.

Among white MSM/IDU living with HIV disease, the number of cases was greatest among individuals 45-64 years old at the end of 2009 (Table 8). Among the three black MSM/IDU living with HIV disease, two were between 25-44 and the other was between 45-64 years of age at the end of 2009.

Table 10. Newly diagnosed and living HIV and AIDS cases in injecting drug users, by selected race/ethnicity and sex, Southeast HIV Region, 2009

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	--	4	57.1%	0	--	12	52.2%
Black Male	0	--	0	0.0%	0	--	2	8.7%
Hispanic Male	0	--	0	0.0%	0	--	0	0.0%
White Female	0	--	1	14.3%	0	--	6	26.1%
Black Female	0	--	2	28.6%	0	--	3	13.0%
Hispanic Female	0	--	0	0.0%	0	--	0	0.0%
SOUTHEAST HIV REGION TOTAL[†]	0	--	7	100.0%	0	--	23	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

Table 11. Living HIV disease cases in injecting drug users, by selected race/ethnicity, by current age group, Southeast HIV Region, 2009

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
25-44	3	18.8%	0	0.0%	2	28.6%	3	60.0%	8	26.7%
45-64	12	75.0%	2	100.0%	5	71.4%	2	40.0%	21	70.0%
65+	1	6.3%	0	0.0%	0	0.0%	0	0.0%	1	3.3%
SOUTHEAST HIV REGION TOTAL	16	100.0%	2	100.0%	7	100.0%	5	100.0%	30	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 12. Living HIV disease cases in injecting drug users, by geographic area, Southeast HIV Region, 2009

Geographic Area	Cases	%
Dunklin County	6	20.0%
St. Francois County	6	20.0%
Remaining Counties	18	60.0%
SOUTHEAST HIV REGION	30	100.0%

There were no new HIV disease diagnoses attributed to injecting drug users (IDU) in 2009 for the Southeast HIV region (Table 10). There were 30 living HIV disease cases attributed to IDU at the end of 2009 in the Southeast HIV region. Of the IDU living with HIV disease, 77% were classified as AIDS at the end of 2009. White males represented the largest proportion of living HIV and AIDS cases.

Overall, the largest numbers of living HIV disease cases among IDU in the Southeast HIV region were between 45-64 years of age at the end of 2009 (21) (Table 11). Among black females, the largest numbers of individuals were between 25-44 years of age at the end of 2009. For all other race/ethnicity and sex categories presented, the largest numbers of persons were between 45-64 years of age.

Dunklin County and St. Francois County had the largest numbers of living HIV disease cases attributed to IDU in 2009 (Table 12).

Table 13. Newly diagnosed and living HIV and AIDS cases in heterosexual contacts, by selected race/ethnicity and sex, Southeast HIV Region, 2009

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	--	6	16.2%	1	100.0%	6	15.0%
Black Male	0	--	10	27.0%	0	0.0%	4	10.0%
Hispanic Male	0	--	0	0.0%	0	0.0%	0	0.0%
White Female	0	--	13	35.1%	0	0.0%	13	32.5%
Black Female	0	--	7	18.9%	0	0.0%	17	42.5%
Hispanic Female	0	--	1	2.7%	0	0.0%	0	0.0%
SOUTHEAST HIV REGION TOTAL†	0	--	37	100.0%	1	100.0%	40	100.0%

*Remained HIV cases at the end of the year.

**Does not include HIV cases diagnosed prior to 2009 that progressed to AIDS in 2009.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

Table 14. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and sex, by current age group, Southeast HIV Region, 2009

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	1	3.8%	0	0.0%	1	1.3%
25-44	3	25.0%	9	64.3%	11	42.3%	18	75.0%	42	54.5%
45-64	5	41.7%	4	28.6%	12	46.2%	5	20.8%	26	33.8%
65+	4	33.3%	1	7.1%	2	7.7%	1	4.2%	8	10.4%
SOUTHEAST HIV REGION TOTAL	12	100.0%	14	100.0%	26	100.0%	24	100.0%	77	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of cases per age group.

Note: Percentages may not total due to rounding.

Table 15. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity, by geographic area, Southeast HIV Region, 2009

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Butler County	4	44.4%	5	55.6%	0	0.0%	9	11.7%
Scott County	4	50.0%	4	50.0%	0	0.0%	8	10.4%
Cape Girardeau County	1	20.0%	4	80.0%	0	0.0%	5	6.5%
Dunklin County	3	42.9%	4	57.1%	0	0.0%	7	9.1%
St. Francois County	4	80.0%	1	20.0%	0	0.0%	5	6.5%
Pemiscot County	2	28.6%	5	71.4%	0	0.0%	7	9.1%
Remaining Counties	20	55.6%	15	41.7%	1	2.8%	36	46.8%
SOUTHEAST HIV REGION TOTAL	38	49.4%	38	49.4%	1	1.3%	77	100.0%

*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

**Percentage of race in each area.

***Percentage of cases per area.

Note: Percentages may not total due to rounding.

There was one new HIV disease diagnosis attributed to heterosexual contact in 2009 for the Southeast HIV region (Table 13). Black females represented the largest proportion living AIDS cases, whereas white females represented the largest proportion of living HIV cases among heterosexual contact cases.

At the end of 2009, the majority of heterosexual contact cases living with HIV disease were between 25-44 years of age for black males and black females (Table 14). Those 45-64 years of age represented the largest proportion among white males and white females.

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for heterosexual contact cases (Table 15). In Cape Girardeau County and Pemiscot County, black heterosexual contact cases comprised a larger proportion of living cases compared to other areas.

Figure 7. Reported P&S syphilis cases, by race and sex, by age group at diagnosis, Southeast Region, 2009

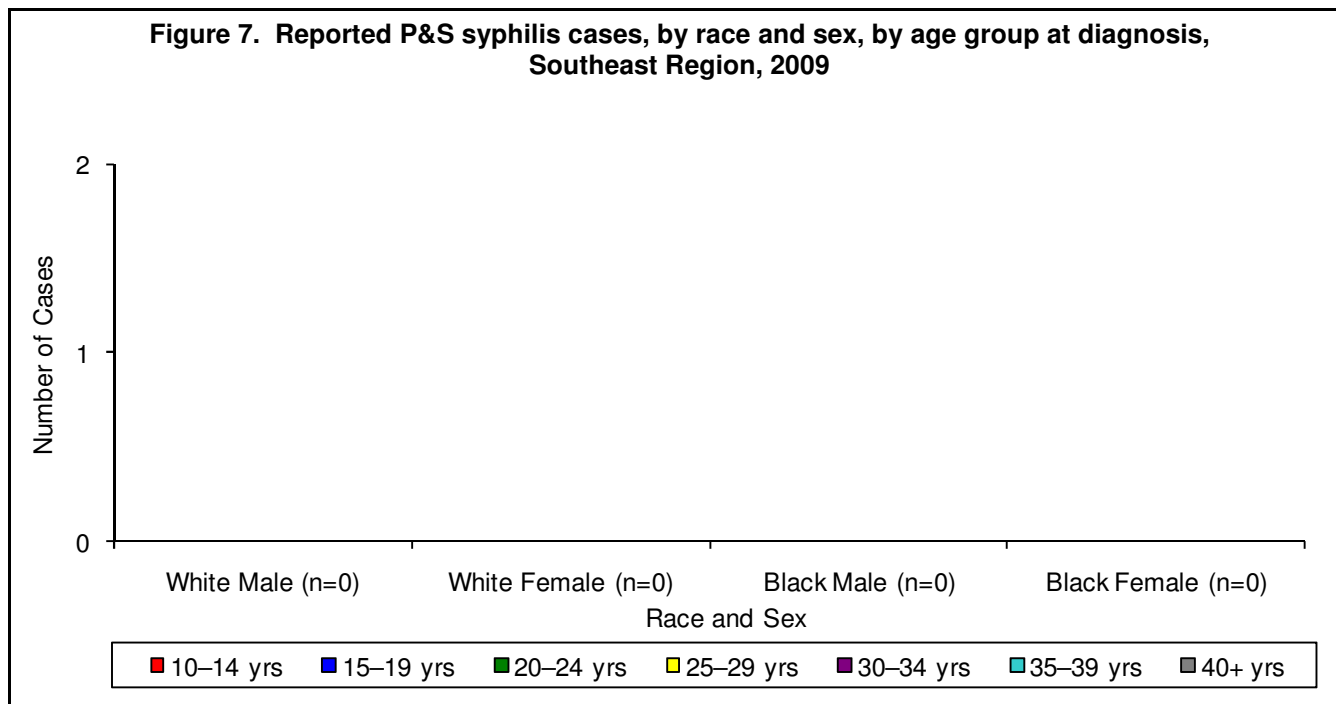
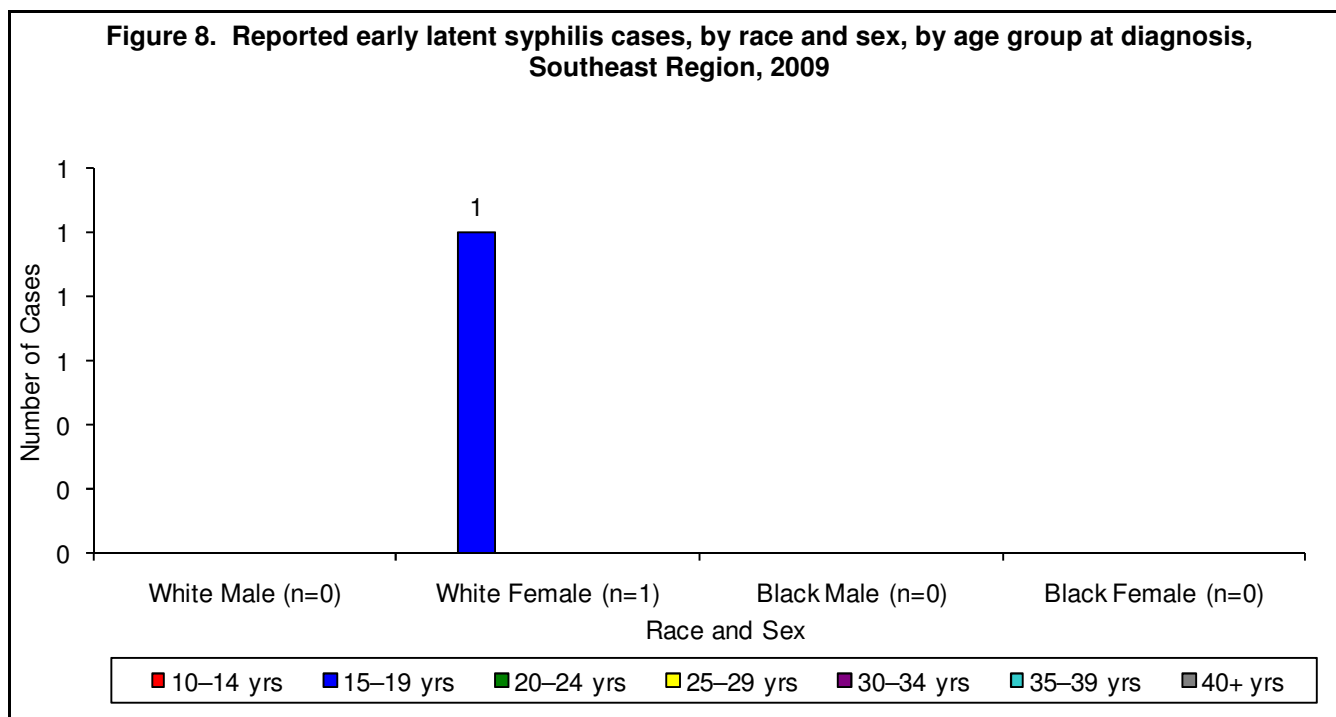
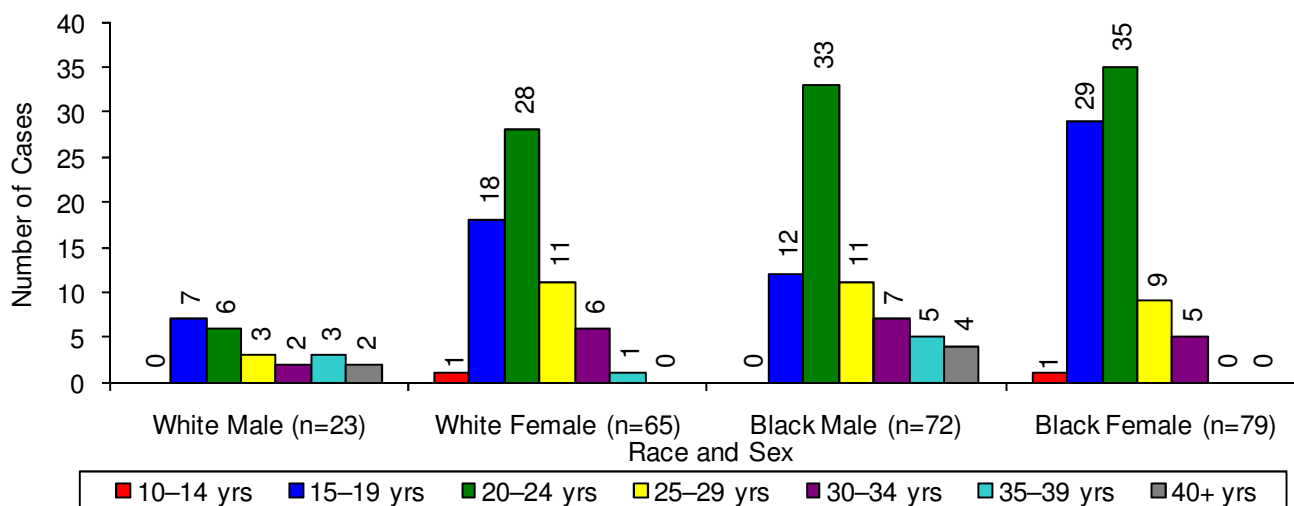


Figure 8. Reported early latent syphilis cases, by race and sex, by age group at diagnosis, Southeast Region, 2009

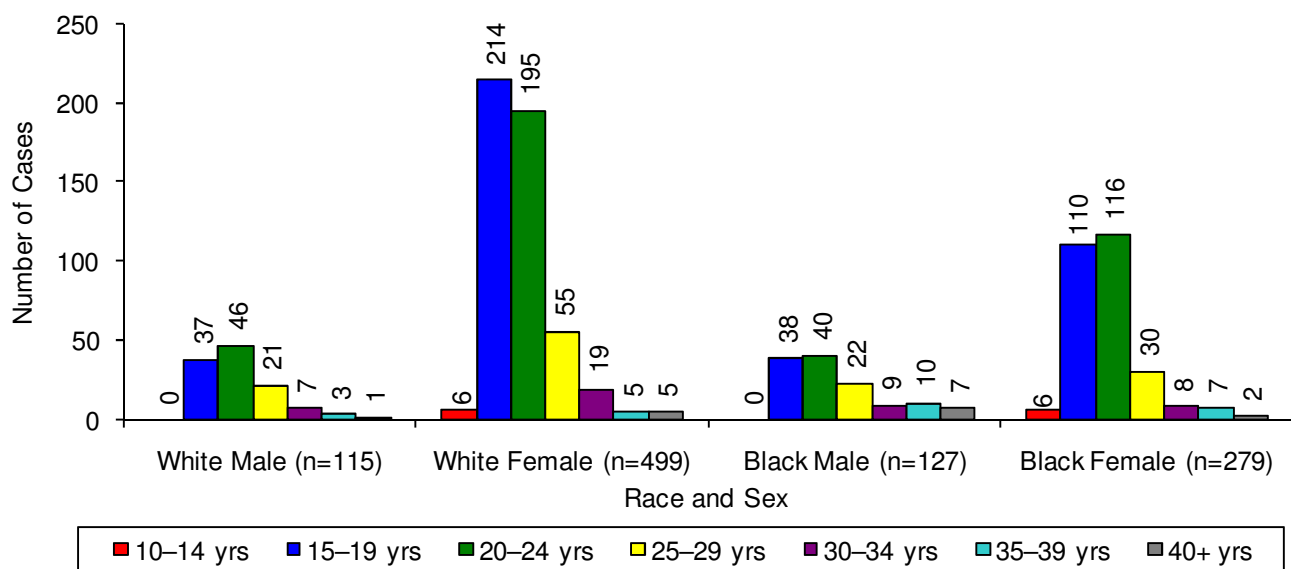


In the Southeast region, no P&S syphilis cases were reported in 2009 (Figure 7). In 2008, there were two P&S syphilis cases reported among white males.

There was only one early latent syphilis case reported in 2009, compared to seven cases reported in 2008 (Figure 8). The number of reported early latent syphilis cases decreased from 2008 to 2009 among all race/ethnicity and sex categories presented.

Figure 9. Reported gonorrhea cases, by race and sex, by age group at diagnosis, Southeast Region, 2009

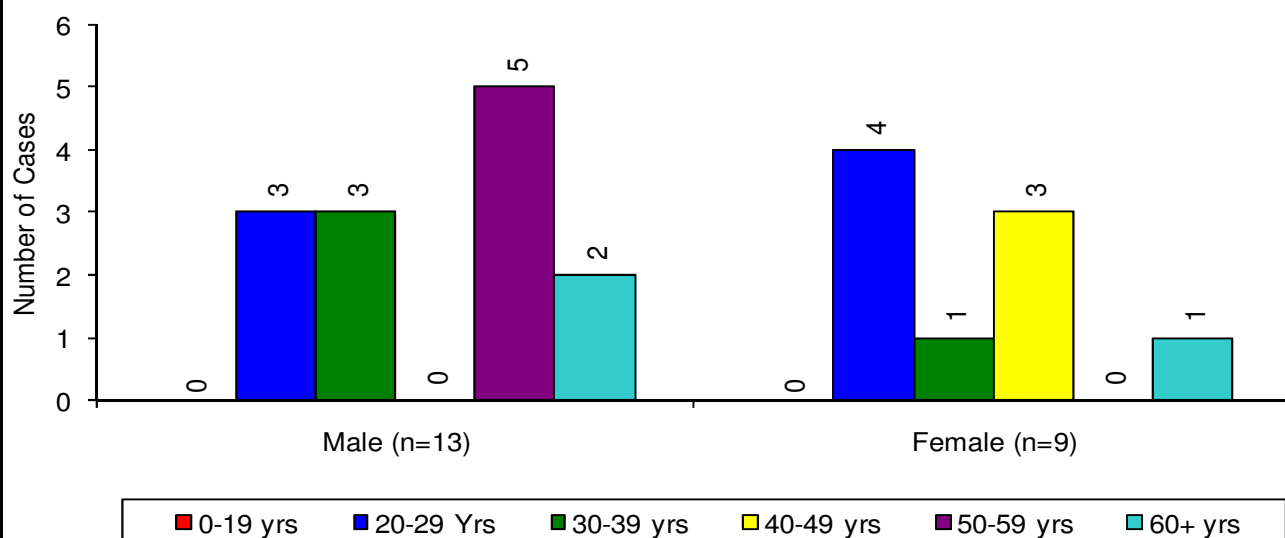
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

Figure 10. Reported chlamydia cases, by race and sex, by age group at diagnosis, Southeast Region, 2009

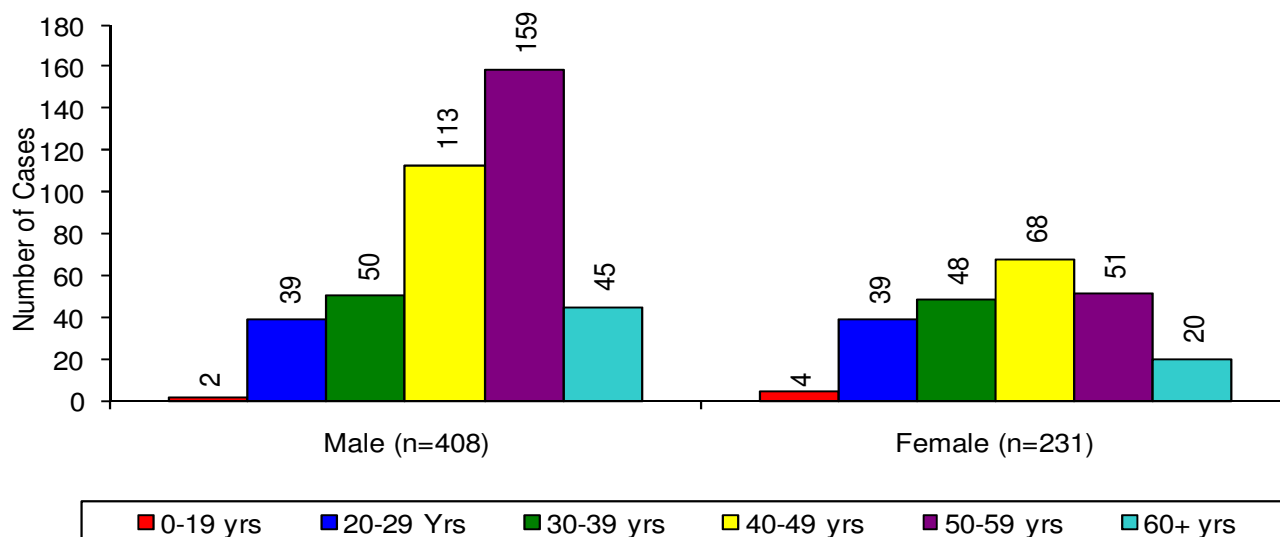
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

The largest number of gonorrhea cases was reported among black females (79) and black males (72) (Figure 9). The number of reported cases decreased from 2008 to 2009 among all race/ethnicity and sex categories presented. Among white and black females and black males, the largest numbers of cases were diagnosed between 20-24 years of age. Among white males, the largest numbers of cases were diagnosed between 15-19 years of age.

The largest number of chlamydia cases was reported among white females (499) followed by black females (279). The number of reported chlamydia cases decreased from 2008 to 2009 among black females (297 to 279), but increased among all other race/ethnicity and sex categories presented. Among white females, individuals 15-19 years of age represented the largest number of reported cases. Among white and black males and black females, the largest numbers of reported cases were diagnosed between 20-24 years of age.

Figure 11. Reported Hepatitis B cases, by sex and by age group at diagnosis, Southeast Region, 2009

Note: Totals include persons whose age at diagnosis is unknown.

Figure 12. Reported Hepatitis C cases, by sex and by age group at diagnosis, Southeast Region, 2009

Note: Totals include persons whose age at diagnosis is unknown.

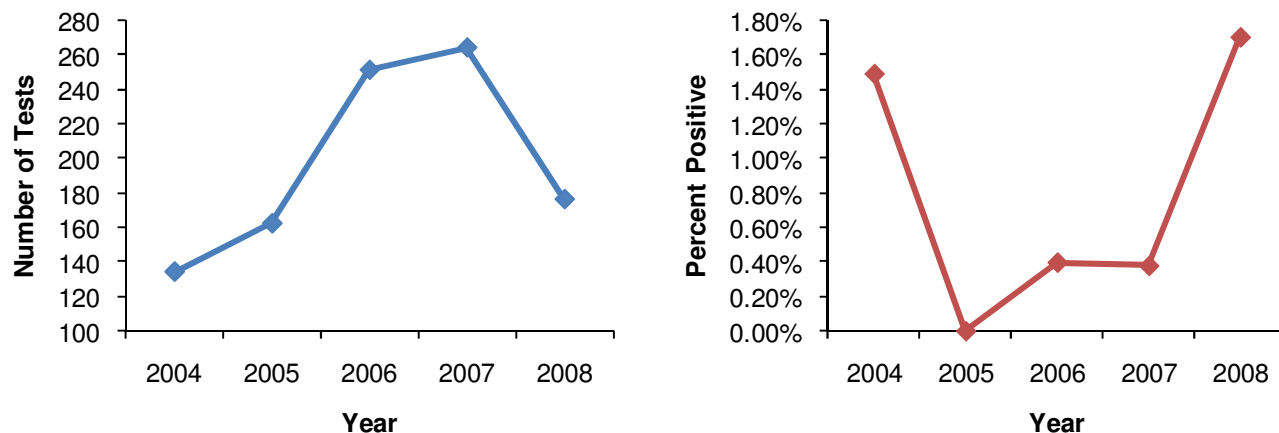
There were 22 reported cases of Hepatitis B in the Southeast HIV region during 2009 (Figure 11). Females represented 41% of reported Hepatitis B cases, which was lower than the proportion of females cases reported in Missouri overall (60%). There were differences in the age distribution of reported Hepatitis B cases by sex. Among males, the largest numbers of cases were diagnosed between 50-59 years old. Among female cases, nearly an equal number of cases were reported among those 20-29 years old and those 40-49 years old.

In 2009, there were 639 Hepatitis C cases reported in the Southeast HIV region (Figure 12). Of the reported Hepatitis C cases, 64% were male. There differences in the age at diagnosis of reported Hepatitis C cases by sex. A greater proportion of females was diagnosed at less than 50 years of age (69%) compared to males (50%).

Table 16. Number of HIV tests* and positive tests among counseling, testing and referral program sites, by current gender, race/ethnicity, age, exposure category, and test method, Southeast HIV Region, 2008			
	Total Tests N	Positive Tests N	%
Total	176	3	1.7%
Current Gender			
Male	72	3	4.2%
Female	101	0	0.0%
Transgender	0	0	--
Unknown	3	0	0.0%
Race/Ethnicity			
White	85	3	3.5%
Black	84	0	0.0%
Hispanic	2	0	0.0%
Other/Unknown	5	0	0.0%
Age at Test			
<13	0	0	--
13-18	28	0	0.0%
19-24	57	1	1.8%
25-44	58	1	1.7%
45-64	32	1	3.1%
65+	1	0	0.0%
Unknown	0	0	--
Exposure Category			
MSM	18	3	16.7%
MSM/IDU	1	0	0.0%
IDU	10	0	0.0%
Heterosexual Contact**	15	0	0.0%
Presumed Heterosexual Contact***	76	0	0.0%
Unknown	56	0	0.0%
Test Method			
Rapid	84	1	1.2%
Conventional	92	2	2.2%
Unknown	0	0	--
*Includes only tests where a result was available and where the individual did not self-report a previously positive HIV test and reported residing in the Southeast HIV Region.			
**Includes males and females who reported no injection drug use and reported high risk heterosexual behaviors with the opposite gender; corresponds with the CDC definition of high risk heterosexual contact.			
***Includes females who reported no history of injection drug use and reported sex with males without additional risk behaviors.			
Source: Missouri Counseling and Testing data			

Table 16 presents testing characteristics only among those tests performed at MDHSS counseling and testing sites among persons residing in the Southeast HIV region where the results were available and for tests where the individual did not report a previously positive HIV test; there were 176 tests that met these criteria. Overall, only three of tests were positive for HIV disease.

The number of tests increased from 2004-2007 and decreased from 2007-2008 in the Southeast HIV region among persons who were tested at MDHSS counseling and testing sites (Figure 13). The percent of tests that were positive fluctuated during the same time period. Trends in the percent of positive test results over time should be interpreted with caution due to the small number of positive test results.

Figure 13. Number of HIV tests and percent positive results at Missouri counseling and testing sites, Southeast HIV Region, 2004-2008

Source: Missouri Counseling and Testing data

There were variations in the distributions of case management enrollment, ADAP enrollment, and persons living with HIV disease by current gender (Table 17). Males and persons 25-44 years of age tended to represent a greater proportion of persons enrolled in ADAP compared to all persons living with HIV disease in the region and persons enrolled in case management. Differences in demographic information may exist because data regarding persons living with HIV disease were obtained from a different source (eHARS) than information on persons enrolled in case management or ADAP (FACTORS).

Table. Demographic characteristics of persons enrolled in HIV medical case management, persons enrolled in ADAP, and persons living with HIV disease, Southeast HIV Region, 2009

	<u>Enrolled in Case Management</u>		<u>Enrolled in ADAP*</u>		<u>Living HIV Disease</u>	
	N	%	N	%	N	%
Current Gender						
Male	174	72.8%	88	76.5%	235	71.9%
Female	64	26.8%	26	22.6%	91	27.8%
Transgender	1	0.4%	1	0.9%	1	0.3%
Unknown	0	0.0%	0	0.0%	0	0.0%
Total	239	100.0%	115	100.0%	327	100.0%
Race/Ethnicity						
White	168	70.3%	77	67.0%	228	69.7%
Black	65	27.2%	33	28.7%	92	28.1%
Hispanic	3	1.3%	3	2.6%	5	1.5%
Asian/Pacific Islander	0	0.0%	0	0.0%	0	0.0%
American Indian/Alaskan Native	2	0.8%	1	0.9%	0	0.0%
Two or More Races/Unknown	1	0.4%	1	0.9%	2	0.6%
Total	239	100.0%	115	100.0%	327	100.0%
Current Age[‡]						
<13	2	0.8%	0	0.0%	2	0.6%
13-18	1	0.4%	1	0.9%	1	0.3%
19-24	12	5.0%	9	7.8%	10	3.1%
25-44	113	47.3%	65	56.5%	154	47.1%
45-64	108	45.2%	39	33.9%	146	44.6%
65+	3	1.3%	1	0.9%	14	4.3%
Unknown	0	0.0%	0	0.0%	0	0.0%
Total	239	100.0%	115	100.0%	327	100.0%

*ADAP=AIDS Drug Assistance Program

‡As of December 31, 2009

Source: FACTORS and eHARS

Glossary

AIDS case

This refers to an individual who has been infected with human immunodeficiency virus (HIV) that is in the later stages of the disease process and has met the case definition for AIDS.

Case rate

The frequency of a defined event in a specified population for a given time period, usually expressed as the number of cases per 100,000 people in a population. Case rate is calculated by dividing the number of cases in the population of interest by the total number of people in the population. Then multiplying by 100,000 to get the rate per 100,000.

Case definition for AIDS

All HIV-infected people who have fewer than 200 CD4⁺ T cells per cubic millimeter of blood (healthy adults usually have 800 to 1,200, with 1,000 the average). In addition, the definition includes 26 clinical conditions that affect people with advanced HIV disease. Most of these conditions are opportunistic infections that generally do not affect healthy people.

CD4+ T cells

This is a white blood cell with CD4 molecules on its surface. These cells play an important role in the human immune system. Sometimes referred to as “helper” cells, they orchestrate the body's response to certain microorganisms such as viruses. HIV virus particles attack and utilize these cells to multiply.

Cumulative number of cases

The number of all cases diagnosed with a particular condition including living and deceased individuals in a specified area.

Date of diagnosis

The date a laboratory makes a diagnosis based on the chemical analysis of a specimen.

Epidemic

The “occurrence in a community or region of cases of an illness, specified health-related behavior, or other health-related events clearly in excess of normal expectancy.”

Highly active antiretroviral therapy (HAART)

This is a treatment protocol using a combination of antiretroviral drugs to suppress the HIV virus. These drugs consist of four basic classes depending on their method of suppression: reverse transcriptase (RT) inhibitors, protease inhibitors (PI), fusion inhibitors, and integrase inhibitors.

HIV case

It refer to an individual who has been infected with the human immunodeficiency virus (HIV) that is in the early stages of the disease process and has not met the case definition for AIDS.

HIV disease case

This includes all individuals who have been infected with the human immunodeficiency virus (HIV). Cases can be sub-classified into either HIV cases or AIDS cases.

Incidence

The number of new cases of a specified condition diagnosed within a given time. The calendar year is used in the *Profiles* to calculate incidence.

Incidence rate

The number of new cases diagnosed in a specified population for a given time period, usually expressed as the number of cases per 100,000 people in a population. Incidence rate is calculated by dividing the number of new cases in the population of interest by the total number of people in that population. Then multiplying by 100,000 to get the rate per 100,000.

Modes of transmission

Also referred to as **exposure categories**, this term refers to the way in which an individual acquired the HIV virus. The most common modes of transmission are: men who have sex with men (MSM), heterosexual contact,

injection drug users (IDUs), men who have sex with men and practice injection drug use (MSM/IDUs), hemophilia/coagulation disorder, and blood transfusion or tissue recipients.

Point prevalence

This refers to the number of persons living with a specified condition at a given point in time. December 31st, is used for the *Profiles* to calculate the number of persons living with HIV or AIDS for each year.

Prevalence rate

The number of individuals living with the specified condition in a specified population for a given time period, usually expressed as the number of cases per 100,000 people in a population. A prevalence rate is calculated by dividing the number of living cases in the population of interest by the total number of people in that population. Then multiplying by 100,000 to get the rate per 100,000.

Sexually Transmitted Infections

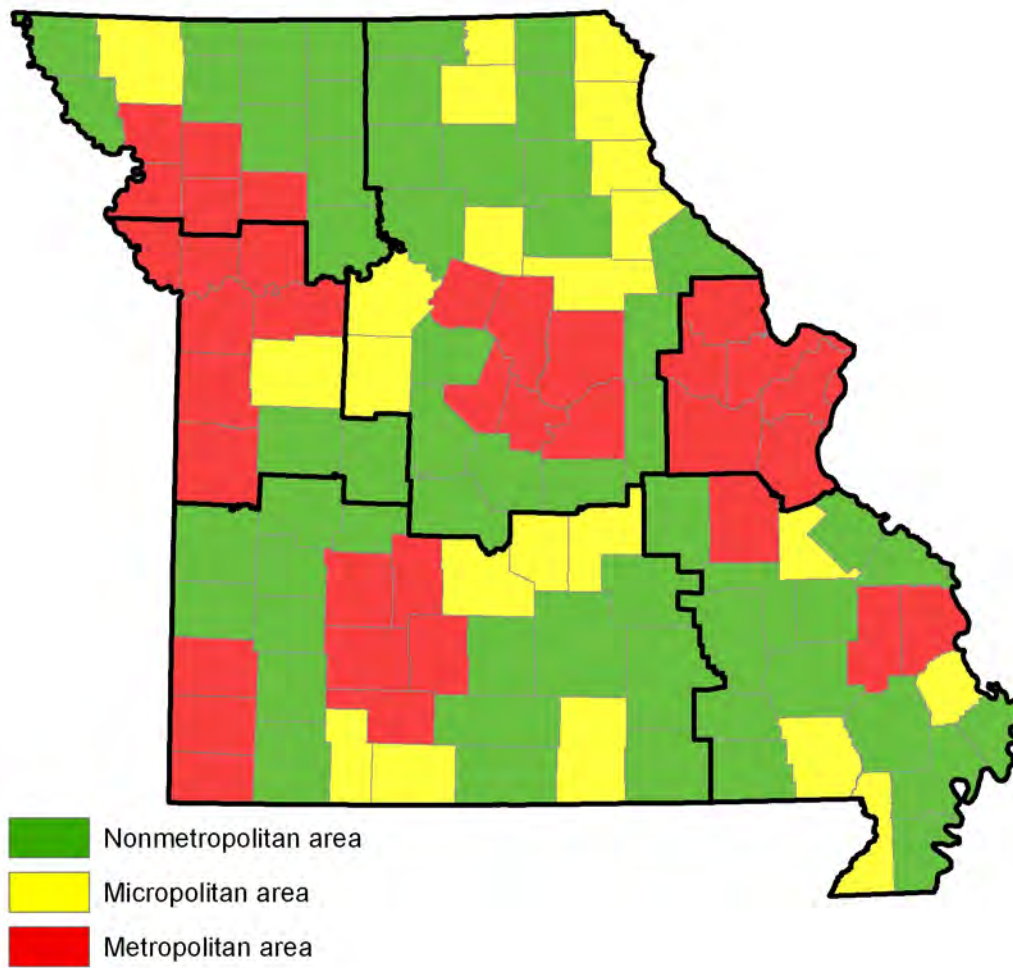
Sexually transmitted infections (STIs), commonly called **sexually transmitted diseases (STDs)** and once called venereal diseases, are among the most common infectious diseases in the United States today. They are a group of infections that are predominantly transmitted through sexual activity.

Sexually Transmitted Infections and the Organisms Responsible

Disease	Organism(s)
Acquired Immunodeficiency Syndrome (AIDS)	Human immunodeficiency virus
Chlamydial infections	Chlamydia trachomatis
Gonorrhea	Neisseria gonorrhoeae
Syphilis	Treponema pallidum

Appendix

Metropolitan, micropolitan, and nonmetropolitan areas by county



Source: Missouri Census Data Center, MABLE/Geocorr2K. 2008 Metropolitan Divisions.